DOCUMENT RESUME

ED 092 232 PS 007 308

| | |
|---|---|
| AUTHOR | White, Sheldon H.; And Others |
| TITLE | Federal Programs for Young Children: Review and Recommendations. Volume 3: Recommendations for Federal Program Planning. |
| INSTITUTION | Huron Inst., Cambridge, Mass. |
| SPONS AGENCY | Department of Health, Education, and Welfare, Washington, D.C. Office of the Assistant Secretary for Planning and Evaluation. |
| REPORT NO | DHEW-OS-74-103 |
| PUB DATE | 73 |
| NOTE | 329p.; For other volumes of this report, see PS 007 306, 307, and 309 |
| AVAILABLE FROM | Huron Institute, 119 Mt. Auburn St., Cambridge, MA 02188 (complete 4-volume set, shipped book rate, $1.50); Superintendent of Documents, U. S. Government Printing Office, Washington, D.C. 20402 (Publication No. (OS) 74-103) |
| EDRS PRICE | MF-$0.75 HC-$16.20 PLUS POSTAGE |
| DESCRIPTORS | Behavioral Science Research; Day Care Services; *Early Childhood; *Federal Programs; Guidelines; *Literature Reviews; Preschool Programs; *Program Administration; *Program Planning |

ABSTRACT

This document is the third part of a comprehensive study designed to review child development data and a program evaluation data so that proposals for Federal program planning can be made. This section (Volume 3) includes a series of three chapters directed at future program management. The first chapter examines the bases for present and proposed preschool and day care programs, and makes recommendations to optimize program utility. The second chapter recommends general directions for the planning of services for children. The final chapter discusses a possible organization of future research work that might provide input into program management and program planning. (DP)

ED 092232

U S DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

MAY 16 1974

# FEDERAL PROGRAMS FOR YOUNG CHILDREN: REVIEW AND RECOMMENDATIONS

## VOLUME III: RECOMMENDATIONS FOR FEDERAL PROGRAM PLANNING

1973

BEST COPY AVAILABLE

PS 007308

Department of Health, Education, and Welfare
Washington, D.C.

ED 092232

# FEDERAL PROGRAMS
# FOR YOUNG CHILDREN:
# REVIEW AND RECOMMENDATIONS

## VOL. III: RECOMMENDATIONS FOR FEDERAL PROGRAM PLANNING

Sheldon H. White
and
Mary Carol Day
Phyllis K. Freeman
Stephen A. Hantman
Katherine P. Messenger

THE HURON INSTITUTE

PS 007308

CONTRACT NO. HEW-OS-71-170
PUBLICATION NO. (OS)74-103

---

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402

# FEDERAL PROGRAMS FOR YOUNG CHILDREN: REVIEW AND RECOMMENDATIONS

## Table of Contents

Page

Vol. I: Goals and Standards of Public Programs for Children

Chapter 1 Purpose and Design of the Study 1
Chapter 2 The Evolution of Public Programs for Children 15
Chapter 3 Critical Periods and Early Experience 80
Chapter 4 Prediction from Childhood Characteristics to Adult Characteristics 130
Chapter 5 Health Care for Children: Needs, Goals and Standards 367
Bibliography
Appendix I Longitudinal Relationship Among IQ, SES Factors, Educational Attainment, Income and Occupation: The Jencks et al. Estimate Using Path Analysis

Vol. II: Review of Evaluation Data for Federally Sponsored Projects for Children

Chapter 7 Early Elementary Education 1
Chapter 8 Preschool Projects 108
Chapter 9 Day Care Projects 200
Chapter 10 Family Intervention Projects 238
Chapter 11 Health Care Programs 288
Bibliography
Appendix IIA Effects of Desegregation
IIB Federal Interagency Day Care Requirements, '71
IIC Federal Day Care Requirements, '72 (Draft)

Vol. III: Recommendations for Federal Program Planning

Chapter 12 Recommendations Regarding Preschool and Day Care Programs 1
  Preschool Recommendation 9
  Day Care Recommendation 31
Chapter 13 Recommended Emphases in Programs for Children 50
  Education Recommendations 57
  Work with the Family 86
  Health Recommendations 105
Chapter 14 Comments on Future Analysis 133
Bibliography
Appendix IIIA Numbers of Disadvantaged Children
IIIB Federal Programs Affecting Children -- A Listing
IIIC Federal Programs Affecting Children -- An Attempt at Useful and General Analysis and Description
IIID Values, Knowledge and Social Policy: Martin Rein

# FEDERAL PROGRAMS FOR YOUNG CHILDREN:

# REVIEW AND RECOMMENDATIONS

Project Director: Sheldon H. White, Ph.D.

Project Coordinator: Carolyn S. Brinnon

Senior Research Assistants:
- Mary Carol Day
- Phyllis K. Freeman
- Stephen A. Hantman
- Katherine P. Messenger

Research Assistants:
- Russell J. Andrews
- Joyce Bowden
- Gail E. Glick
- Neal J. Gordon
- Gregory A. Jackson
- Carolyn M. Newberger
- Frederika Randall
- Diane R. Schodlatz
- Rochelle D. Silver

Special Research Assistants:
- Karen M. Cohen
- Deborah Klein Walker
- Peter R. Linkow
- John Merrow
- Michael R. Olneck
- William C. Ronco

Final report submitted September 15, 1972 to the Office of the Assistant Secretary for Planning and Evaluation, Department of Health, Education & Welfare, by the Huron Institute, Cambridge, Massachusetts, in fulfillment of Contract # HEW-OS-71-170.

# Chapter 12: Recommendations Regarding Preschool and Day Care Programs

## Summary

Chapter 12 analyzes policy considerations in two broad existing and proposed federal programs, preschools and day care. They are analyzed in terms of child development and other issues. Our recommendations for preschool programs (particularly Head Start) are:

I. Diversify Head Start away from the present primary investment in center-based preschool education.
  - --Broaden its focus (to aspects of child development in addition to the cognitive and academic), its format (parent training, various projects targeted to special needs), and the range of indices used to indicate its effectiveness.
  - --Continue research on the effects of center based preschool education.
  - --Conceive of Planned Variation as research only, and alter its size and design accordingly.

II. Implement screening programs for all children under the conditions given below. We suggest screening followed by appropriate treatment at birth, 2-3 years, and kindergarten.
  - --Screening should be conducted by appropriately-trained personnel (not necessarily pediatricians) who work within a health system with comprehensive referral capabilities.
  - --Screening for and identification of needs should occur only when programs to meet the needs are available.
  - --Screening priorities should be based on diagnostic sophistication, the risks of late identification, and the availability of appropriate programming.

III. Provide individualized services for preschool children with special needs as early in the child's life as is beneficial. Services should in most cases include parent training.
  - --Currently we seem best able to provide programming for preschool children with sensory and physical needs. Programs should be implemented for such children.
  - --Focus on research and development of programming models where our knowledge is inadequate for current implementation (e.g., in the areas of learning disabilities, behavior disorders, or emotional disturbances).
  - --Implement bilingual preschool projects for non-English speaking children to prepare them for the regular school system.
  - --Adjust categorical funding at the programming level to permit integration of children with different special needs in the same preschool projects, while at the same time insuring the continued individuality of the services provided.
  - --Integrate children with special needs into regular school programs as much as possible, especially using special preschools to permit later regular school attendance.

In the case of day care, we first consider child development issues, and conclude that

I. Day care meeting some carefully considered standard of basic adequacy will not be detrimental to children's development.

II. There is virtually no way at present to know what must be added to such basic care so as to positively affect children's development generally.

III. Research is needed to more definitely understand the potential and present effects of day care on children; in its absence, substantial investment in developmental day care appears inadvisable.

After a consideration of various arguments for day care, we recommend:

I. That a system of day care facilities, including centers, homes, places in private centers, homemaker services, and other facilities as outlined in the Support section be organized to deal with the needs of children from unsupervised, inadequately supervised, crisis, and stress situations as needed.

II. That some appropriate organization such as outreach services from an appropriate health care network be devised, tested, and instituted to provide screening of young children for potential health and educational problems, and that a full complement of services be made available to deal with those problems as necessary. Where research is necessary to accomplish this, it should be supported.

III. That a very limited number of densely populated areas be selected for the experimental establishment of a multi-purpose day care center offering a broad spectrum of services, with both the centers and detailed analysis of their operation to be supported by the Federal government. This proposal is directed more at obtaining information on the optimal way to operate a center so as to most effectively and efficiently cope with the usage rates, types of problems, program successes, and a score of other basic facts about even a rough approximation to an average day care center.

IV. That efforts be made to produce and execute housing designs that will promote informal or otherwise shared child care arrangements. The goal is a modern urban equivalent of the unfenced middle-of-the-block backyard.

There are several more general recommendations which we state in this latter section. First, all day care, whether in homes or centers, should be of such a quality as to offer very little risk of harming the child. Second, we recognize that advances in the state of knowledge about early childhood might substantially change our conclusions, particularly in the area of child development. Analysis has shown the necessity of further knowledge about children; we urge that its pursuit be encouraged. Third, there might exist local situations in which a day care center is in any terms, including financial, the best solution to a group of problems. In such situations, facilities should be provided.

## Chapter 12: Recommendations Regarding Preschool and Day Care Programs

The three chapters of Part III offer recommendations for Federal program planning for children based on the reviews summarized in Parts I and II. Chapter 12 offers recommendations relevant to currently proposed and existing preschool and day care programs. Chapter 13 offers a set of broader recommendations intended to be relevant for planning for a number of programs in education, family intervention, and health care. Finally, Chapter 14 offers a discussion of future organization of research and future research issues.

### Procedure for Arriving at Recommendations

The reviews of literature undertaken in Parts I and II of this report trace through a line of argument for childhood intervention that is fairly common. Support for public intervention on behalf of children generally follows an argumentative sequence something like this:

(1) A population, or populations, of children are identifiably disadvantaged.

(2) Disadvantages in childhood are particularly crucial and significant in that they have an identifiable negative influence on the child's life viability, or life chances. This negative influence is difficult, or impossible, to correct by intervention at later ages.

(3) An investment in childhood is of strategic importance--and, in fact, cost-beneficial to society--in that it can lower the incidence of later personal and social blights such as poverty, dependency, delinquency, and mental and physical handicaps.

This argumentative sequence is sometimes, though not always, joined with an argument that programmatic interventions for children will produce real and measurable benefits for their present and future chances in life. Arguments such as the following are implied by this:

(4) One can express all or some part of the significant goals of intervention programs in childhood as observable indices or measurements.

(5) These indices or measurements applied to programs for children will provide a fair test of their efficacy as programs and the benefits they bring to children.

The literature reviews of Parts I and II above may be regarded as an attempt to trace through this sequence of argument to test how fully and directively it is supported by existing research findings. To what extent do existing child development data and program evaluation data offer support for programs of intervention in childhood? To what extent do they offer guidance for the development of such programs?

The analyses of Parts I and II were, on the whole, somewhat discouraging in that they did not find the definitive support in the relevant data bases to sustain and connect the sequence of arguments. To give, briefly, the import of the reviews:

--It is impossible to identify populations of disadvantaged children at risk in our society. The children are disadvantaged according to not one, but several standards of disadvantage. Some kinds of disadvantage are manifest in situations of immediate and apparent risk to the child, seeming to require intervention in the child's circumstances or environment. Other kinds of disadvantage are more argumentatively problems of children or childhood alone. Some of the manifold "deprivations" or "deficits" imputed to disadvantaged children would appear to be somewhat argumentative interpretations of "differences". The child may have a problem. Or, alternatively, the problem may lie in The System, or in the fit of a System designed for an average kind of family with the behavior or child care patterns of a non-average kind of family.

--There is strong evidence in the animal data, and moderate evidence in the human data, of a special significance of events and circumstances in early experience. "Critical" periods--or, at least, sensitive periods --are identifiable in animal data though not yet very clearly in human data. But the aggregate of early experience data as yet does not tell us what the significant facets of a child's early experience are. Nor does it tell us how, when, or whether environmental intervention may be introduced to produce significant positive effects for the child.

--There is a literature which connects events and circumstances of early childhood with outcomes in later adulthood through follow-back and follow-up studies. But this literature, at best, demonstrates correlational connections between early and late events. It does not, by and large, demonstrate how and where intervention in childhood can significantly change the child's later life chances. Some health problems offer predictable risks for the child's later life chances--e.g., birth difficulties.

--There is only limited technology available for the evaluation of intervention programs on behalf of children. Most goals now set forth for programs for children are difficult or impossible to assess using existing measures and indices. The most fully adequate instruments for assessment are the existing IQ and achievement tests. They are imperfect instruments, but they alone have some properties of adequate norming, reliability, validity, and social credibility. A large number of indices exist as noncognitive measures, but a dependence on a noncognitive measure is, right now, a dependence on a fairly weak kind of face validity.

--Program evaluation data, of the kind reviewed in the chapters in Part II, give a limited picture of program efficacy. Even in program areas where evaluation studies are well established, existing evaluation data are uneven in quality and limited in number and scope. Where evaluation data do exist in some density, it is not certain that one can make an evenhanded judgment about various program approaches using existing indices. Finally, there is an overall negativity about the existing evaluation data that is in itself suspicious. Is the broadside impression of negative effects reflective of a broad futility of the interventions, or a broad inefficacy of existing techniques of program evaluation?

We find, then, that as we trace through the typical argumentative sequence supporting public intervention on behalf of children, it does not seem to sit well on the underlying data. This does not mean that the argumentative sequence is wrong--not at all. It does mean that we are not well able at present to crystallize the argument in a concentration of solid lines of evidence. The argument does not have a good data base in that special sense in which we have attempted to test the data base in this study. We noted before, in the introduction to the study in Chapter 1, that an unusual test of the relevance of data was embodied in this study--the test not of suggestiveness, but of definitiveness for program guidance.

One can believe that if the data had been relatively solid, the data would yield recommendations for future program planning. The argumentative sequence that formed the frame for the study was, in itself, not bad. Reasonable data put into such a frame might yield reasonable, or at least entertainable, program suggestions. How does one proceed with relatively inconclusive data? This was a question that became of more and more concern as the study proceeded and as the pattern of findings in Parts I and II became more clear. Could any recommendations be made from these data? How?

The recommendations finally set forth in the chapters of this section represent: (1) an attempt to use patterns of findings appearing in the data for program guidance; (2) an attempt to direct programs toward giving recognizable services for recognizable needs; and (3) some attempt to avoid strong theories of intervention, or strong reliance on hypothetical factors as a basis of intervention.

(1) Here and there within the literature reviews, certain patterns of findings seemed suggestive for program planning.

--In the reviews of preschool and early education data there appeared again and again findings to suggest that some kind of 'structure and management' factor seems to get better educational performance on achievement tests from children in compensatory programs. Achievement tests are quite debatable tests of educational value but one can argue that for the first three grades of school, at least, they have some reasonable value as a standard. They reflect literacy training. Accordingly, we have recommended an increased emphasis on structure and management in educational programs for disadvantaged children.

--In our readings of early education, preschool, and day care project reports, we encountered repeated testimony to the effect that these programs do not function well unless they have at least the understanding and--better--the cooperation of the parents of the children involved. At the same time, evidence suggests that parent-mediated, Home Start kinds of programs do at least as well as center-based programs, with the possible advantage of diffusion effects toward other children in the family. Because of this pattern of findings, and because of some general principles to be discussed below, we have recommended that programs be designed to work with the family rather than around it.

--In our review of evidence, it seemed that all of the arguments for early intervention seemed to work best as applied to the data of health risks in childhood. One can find evidence for significant health problems or risks in childhood, uniquely treatable in the early years (or through the health and nutritional status of the mother), offering estimable risks for the child's later life chances. Accordingly, our recommendations have favored extended health service availability for very young children.

Our analysis of existing data was, then, responsible in a positive sense for several of the recommendations offered in the chapters below. Where suggestive patterns of findings could be found, recommendations guided by them were made. Other recommendations were then advanced on an inverse principle. The general weakness and inconclusiveness of the data was taken as the basis for an argument against strong faith in any one theory of intervention or any large-scale intervention in hypothetical deficit factors in childhood.

--In our review of preschools, we found only limited and inconclusive evidence that preschools give a positive benefit to the child's later life chances. Accordingly, we recommend a diversification of Head Start, questioning the relatively single-minded investment of this comprehensive program in center-based preschool intervention at this time.

--In our review of day care, we found that very little study had been given to possible developmental effects of day care, with very little evidence one way or the other about the positive or negative effects of day care for children. Accordingly, we recommend against a major program investment in developmental day care at the present time, because of the uncertainty about what extra resources to bring about developmental day care would give to children.

Such negative-going recommendations, against large-scale center-based preschools and against developmental day care, do not imply a firm negative judgment about the value of such programs. It does imply a recognition that their value is not demonstrable. They do not deserve major implementation at the expense of other kinds of services that have a clearer and less speculative value for children.

(2) The paragraphs above discuss the use of the data reviews in the determination of the recommendations offered in this report. Other considerations governed recommendations. From the very definition of disadvantage, as elaborated in Chapter 2, we took two general considerations as governing principles for program interventions:

(a) Disadvantage is plural. It involves heterogeneous children burdened with heterogeneous problems. Services cannot be directed at modal children. They must be individualized.

(b) In a significant majority of the definitions of disadvantage, there is an issue of family weakness, or of a departure of family patterns of child care from those normative child care patterns implicit in the present "contracts" between family and institutional services for children. One can derive from historical trends, as many now do, the argument that historical trends of urbanizations and industrialization have weakened the family. From considerations it seems reasonable to believe that, generally, services should be designed to work with the family and to strengthen it in its child care functions.

These general considerations were embodied in the recommendations and served, in a sense, to "overdetermine" them.

(3) Finally, we were in selected instances led to extend the positive-going and negative-going usage of data analyses discussed under (1) above into some questions about traditional services. We asked the much more sticky questions about whether there are data to support the "theories of intervention" embodied in services that are now established and widespread.

--There are now enough data to seriously question the vocationally directed "theory of intervention" embodied in the practice of public schooling. Present evidence on the direct relationship of education to occupation is not strong. There are demonstrable negative side effects to a monolithic system of education. We were led thus to recommend the initiation of a program to diversify education in the early years in Chapter 13.

In most cases, however, questions about the relationship of traditional theories of intervention to services for children could not be dealt with in this last section in any practical way. We could not offer a strategic recommendation. These residual issues appear largely in the questions raised in Chapter 14 of this section, questions which need continuing analysis.

The two broadest themes for program planning suggested by the analysis of the preceding chapters were these: (1) a need for individualization of services in terms of the child's needs; and (2) a need to develop programs so that they work with the family rather than around it. It was possible to work through rather specific program implications of the second theme, and this has been done in a section of Chapter 13. It was not possible to fully work out implications for the first, and so it will be discussed in general terms here.

The need to individualize services seems to arise partly in the conception of some programs, particularly the prominent programs of the last decade, and partly in the management of some programs, particularly the large body of long-standing Federal and state programs for children.

It was clear that at the time of the founding of Head Start in 1964, there was a strongly felt need for coordination and comprehensiveness of traditional services to children. Indeed, one prominent outlook among those who developed Head Start--an outlook among several--was that the program would achieve this goal. A short while later, Follow Through was developed as a parallel comprehensive intervention to build upon Head Start.

That need appears not to have been satisfied, although it has been expressed throughout the programs' life. We have not systematically documented the need, but we have encountered it in testimony everywhere and in abundance. The problem, in brief, is that those who give service to children are not yet persuaded that they are able to give the right services to the right children.

One possible cause for this may be the failure of recent programs targeted towards comprehensiveness to really achieve comprehensiveness. Why not? Part of the problem seems to have come through a kind of stereotyping of program services. We have noted, in Chapter 1, our success of efforts to fully define 'disadvantage' in childhood. A complex multifaceted set of intervention issues lies behind a stereotype of a modal urban black child or poor child. What seems to have happened is that the programs of recent years have been drawn towards service for this modal child and, furthermore, towards the modal child's modal problem. After Head Start, Follow Through, and Title I of the Elementary and Secondary Education Act had been organized around a central educational theme; only to some unknown extent have they been subsequently diversified.

We considered for some time trying to work out a recommendation to individualized services and, in fact, several other recommendations that might have a similar ultimate effect. But we were finally persuaded that any reasonable development of such a recommendation lay beyond our scope, for several reasons.

First, the problem of individualizing services so that the right service is brought to the right child seems to be less a question of conception and more one of management. The very fact that recent programs intended to bring about coordination and comprehensiveness have failed to do so suggests that something more than having the right idea is necessary. There appear to be obstacles within the management structure of the programs, and we had neither information about the management of the programs nor any particular competence to evaluate it.

Second, the problem of individualizing services is not limited to the few comprehensive programs; it is a problem that draws together the intentions and activities of all the programs that now put out resources for children. This would include the activities of over 200 federal programs, plus a series of complex and idiosyncratic organizations at state and local levels. The system of children's programs as a whole is, or should be, a system which puts out individualized services.

The problem may have arisen because the right channels are there, but a proper total amount of resources has not been put through them. Or the problem may come because the system of channels is a somewhat irrational historical accretion of programs and initiatives. We do not know and we suspect, because the system of channels has never been very well mapped, that no one really knows.

At any rate, within the scope of the recommendations we felt able to make, we have tried to suggest moves toward an individualization of services. It would undoubtedly be helpful if future efforts could be made to map the flow of resources through federal and state channels toward the child, to study local resources for assessing individual children's needs and to find resources to bring to bear on them.

## Preschool Recommendation

This recommendation is concerned primarily with the value of government-funded, center-based preschool projects for disadvantaged children. The recommendation is made against a background of wide interest in preschool projects, evidenced in the nation-wide implementation of Head Start, the relatively large number of university-based experimental preschool projects, the prevalence of local and national evaluation, and the heated data-based and non-data-based arguments about their value. We make two primary, complementary recommendations:

1. Diversify Head Start away from the present primary investment in center-based preschool education; and

2. Provide programs focused on the special needs of preschool children.

These recommendations must be viewed within the framework of the history of Head Start, its original intentions and its current operation.

Our recommendations and our rationale for them will come after this background.

## The History of Publicly-Funded Preschools

Title II of the Economic Opportunity Act of 1964 provided for special programs for low-income families. The original goals of the legislation authorizing Head Start were comprehensive, being directed toward funding community action programs for low-income individuals and families. Programs funded under this legislation could involve employment, health, vocational rehabilitation, housing, job training, home management, and educational assistance. The education of the low-income child was not singled out as a focus. Section 205(a) or the Act, which provided the funding for Head Start, reads as follows:

> The Director (of O.E.O.) is authorized to make grants to or to contract with public or private non-profit agencies...to pay part or all of the costs of community action programs which have been approved by him pursuant to this part, including the cost of carrying out programs which are components of a community action program and which are designed to achieve the purposes of this part. Such component programs shall be focused upon the needs of low-income individuals and families and shall provide expanded and improved services and assistance, and other activities and facilities necessary in connection therewith. Such programs shall be conducted in those fields which fall within the purposes of this part including employment, job training and counselling, health, vocational rehabilitation, housing, home management, welfare and special remedial and other non-curricular educational assistance for the benefit of low income individuals and families.

A Planning Committee was formed in November, 1964 with a broad mandate to develop a project for children three to five years of age and their families. In January, 1965, plans for Head Start were announced. Head Start projects were operative throughout the nation in the Summer of 1965, and in the Fall of 1965 the full-year Head Start program was underway. The entire process of conceptualizing and implementing Head Start was thus extraordinarily rapid (White, 1970).

The original objectives of the Child Development Centers sponsored by the program were comprehensive, including medical, psychological, nutritional, educational, and social work intervention with community and parent decision-making and involvement (Cooke, 1969). The primary foci of the program were to be:

1. Improving the child's physical health and physical abilities.
2. Helping the emotional and social development of the child by encouraging self-confidence, spontaneity, curiosity and self-discipline.

3. Improving the child's mental processes and skills with particular attention to conceptual and verbal skills.
4. Establishing patterns and expectations of success for the child which will create a climate of confidence for his future learning efforts.
5. Increasing the child's capacity to relate positively to family members and others while at the same time strengthening the family's ability to relate positively to the child and his problems.
6. Developing in the child and his family a responsible attitude toward society and fostering constructive opportunities for society to work together with the poor in solving their problems.
7. Increasing the sense of dignity and self-worth within the child and his family.

(OEO, 1965)

Initially efforts were made in various projects to be comprehensive, to involve parents and community, and to change institutions to make them more responsive to the needs of the poor. The OEO yearbooks for 1965, 1966, and 1967 suggest the multiplicity of goals and activities. However, the multiplicity of goals allowed varying interpretations of its main focus, and increasingly Head Start has been moving away from comprehensive goals toward a narrower focus on the child and (even more specifically) on the child's IQ and achievement attainments, i.e., his preparation for school.

The classroom preschool projects implemented under Head Start were generally directed toward the "general enrichment" or adjustment of the child and were based on the traditional model of the middle-class nursery school. Although some descriptions of project curricula stressed teaching to meet specific educational needs, most projects were general in their approach. Before Head Start Planned Variations, surveys of Head Start classroom preschool projects found that most curricula focused on socialization and cultural enrichment in the form of more varied experiences with the world and other people (Boyd, 1966; Westinghouse Learning Corp., 1969).

Some observers of Head Start, like Birch and Gussow (1970) have been dismayed by its concentration on the provision of exclusively or primarily educational experiences and have sought once again to widen its focus:

> We began this book three years ago at a time when America was beginning to 'rediscover' its poor. As we bring the volume to a close, poverty, hunger, and poor health are acknowledged national problems urgently demanding both present amelioration and, for the future, basic and permanent solutions. Poverty produces educational failure, and since lack of education reduces opportunities for employment, it in turn contributes to the perpetuation of poverty, ill health, and social disadvantage. Poverty and ignorance are thus mutually reinforcing.
>
> How does poverty produce educational failure? When we began our work, there was a widespread conviction that poor children failed in school because their early lives had not offered them certain experiences fundamental to school success. The nation having diagnosed educational failure as the product of 'cultural'

> disadvantage, had prescribed more and earlier educational opportunities for children who were experientially deprived. We were convinced that this was too narrow a focus. Events have justified our conviction. Compensatory education, however useful, can not of itself solve the educational problems of the poor. A serious program for the abolition of school failure among disadvantaged children must also include improvement in their economic condition, health, and nutritional status.
> (p. xi)

Looking back on the history of Head Start, we can abstract three primary and parallel conceptions of its goals. While these conceptions existed simultaneously, the focus has tended to shift from the first to the third.

First, some proponents of Head Start viewed it as a core or nucleus of of community action. Until 1969 it was authorized under Title II of the Equal Opportunity Act of 1964 which funded community action programs. Even when Head Start focused more specifically on the child, parents and community were to be integrally involved in the development and maintenance of the program. The Kirschner report (1970a), which documents changes in the health delivery system and educational system of 58 communities with full year Head Start, is the only major attempt to assess the effectiveness of Head Start as a community action program.

Second, the program was seen by some as a long-sought mechanism for the coordination of services for children. In addition to educating, the program was to provide for the coordination of community services, to insure that defects and illnesses were diagnosed and treated, that children received vaccinations and inoculations, that participating children received nutritious meals, and that social services were available to the families of the child.

The third view of the program (see the recent Hunt (1961) and Bloom (1964) books) offered technical arguments that education in the preschool years might have unsuspected and long-lasting potency. Increasing IQ and achievement through preschool education in order to prepare the disadvantaged child for school and, hopefully, to permanently increase his achievement was seen as a worthy goal in itself. As federal interest centered on objective evaluation of program effectiveness, the emphasis on this goal became greater, for IQ and achievement tests, unlike tests of social and emotional development, were available. Smith and Bissell (1970) note in their analysis of the National Impact study of Head Start:

> ...we believe that Head Start is viewed by both Congress and the public as an attempt to prepare disadvantaged children for the first grade, and to bring their academic skill up to the middle class levels (p. 53).

Most Head Start projects, with their emphasis on socialization and cultural enrichment, could be adequately and fairly assessed only by instruments designed to tap social and emotional characteristics of development. But evaluation technology in the social and emotional realms is not well developed, and most preschool projects have used locally developed instruments when they have attempted to assess socio-emotional changes (Chapter 5 of this report; Wargo et al., 1971). Although the sole or even primary purpose of Head Start was not originally to increase IQ scores, Head Start's success or failure has been debated and assessed in large part by IQ and achievement changes partly because of the availablilty of standardized IQ and achievement tests and the government's emphasis on evaluation of program effectiveness. Assessments of effects on the family have used mainly questionnaires, and have asked about the parents' attitudes toward the program and school (Stearns, 1971; McLaughlin, 1971).

Thus Head Start has moved considerably from its comprehensive inclusion of community, family, and child as its target. Furthermore, even in focusing on the child it has not been targeted toward the specific needs of individual children. As was pointed out in Chapter 2, the designation "disadvantage" does injustice to the variety and range of needs within the disadvantaged population. Disadvantaged children, like all others, have different and unique problems. Yet most projects attempted to provide only supportive socialization and cultural enrichment activities to Head Start participants.

A brief summary of the effects of center-based preschool projects follows. Results from experimental preschools are relied on quite heavily. They are somewhat more positive than those of Head Start and indicate, at this time, the maximal impact that could be expected using these approaches to preschool education.

1. Preschool projects often foster immediate IQ score increases of varying amounts, but by the end of the fourth grade or so, significant differences in IQ scores rarely remain between children who have attended preschools and those who have not (Chapter 8; Stearns, 1971);

2. Preschool projects, especially those which focus on specific academic skills, foster immediate increases in scores on standardized achievement tests, but the increases are not stable and their decline parallels that of IQ scores (Chapter 8; Stearns, 1971);

3. Some indication of long-term positive effects of preschool projects is provided by Weikart (1971) and Karnes (1972?) who present evidence that their projects decrease the liklihood of later placement in special education classes.

4. In the noncognitive realm no definitive statements can be made about the effects of preschools; few projects have used standardized, comparable instruments and the problem of norms for social and emotional growth has not been resolved. Wargo et al. (1971) note that "one cannot reasonable expect reliable and sensitive measurement of noncognitive behavior with such instruments; therefore, one cannot expect the noncognitive benefits will be detected even when they are present (p. 34).

a. Tests of self-concept yield contradictory results (Butler, 1970; Stearns, 1971). "It is probably safe to conclude that, on the average, participation in a preschool program for disadvantaged children does not reduce the children's self-confidence, make them unhappy with themselves or make them think that people dislike them" (Stearns, 1971, p. 58).

b. Data on the effects on social behavior are equivocal. Although some data suggest the disadvantaged children evidence more desirable social behaviors (e.g., following the teacher's instructions, self-care skills, playing and sharing with other children) than their peers without preschool, the disadvantaged children are not compared to middle-class peers. Furthermore, children who did not attend preschool adjust to the classroom in a short period of time (Stearns, 1971).

Whatever the noncognitive effects of preschool, it is apparent that they do not translate into long-term changes in IQ or school achievement.

5. Assessments of effects on families are generally based on interviews or questionnaires concerned with attitudes toward preschool or school in general. Parents are overwhelmingly positive in their attitudes toward the program. When parents participate in the preschool project, some studies have shown that their attitudes toward both themselves and their children change; the studies have not followed up these attitudinal changes or looked for related changes, however. In addition, intensive parental involvement in the child's preschool learning has positive effects on the child's cognitive performance (Stearns, 1971).

6. The Kirschner report (1970a) indicated that changes in the educational system and the health delivery systems were effected in 59 communities with Head Start projects, while few such changes occurred in communities without Head Start. Head Start appeared to be integrally involved at many stages in the institutional changes: "Head Start has played important, active, and visible roles in the process of local institutional change. Moreover, it is strikingly evident that changes of the type described above were rarely identified in the communities without Head Start that were studied" (Kirschner, 1970a, p.73). This study, however, does not show definitively whether Head Start was responsible for the institutional changes, whether its presence in the community was one indication of community change and activity, or whether it served as a catalyst or other critical component in a mutually reinforcing and mobilizing interaction.

7. Stearns concludes on the basis of Head Start surveys and records that "widespread immediate good effects on the children due to the feeding program, medical treatments

7. (con't)
and dental services can be presumed. Some longer range benefits can also be presumed to result from fluoridation, immunizations and those few parental health programs which were intensive" (Stearns, 1971, p. 163). These latter preventive measures were implemented by fewer projects than were the immediate examinations and treatments, however.

A number of educators (including Caldwell, 1970; Bereiter, 1972; Sprigle, n.d.) agree that it is unrealistic to expect stable IQ and achievement gains without continuity of educational programming throughout the year, where later tasks reinforce and build upon previous learning. However, Follow Through has thus far provided no definitive evidence that preschool gains are sustained with the models currently being implemented. Even more critical is the question of whether preschool will add additional benefits if elementary schools are modified. Preschools seem to promote no long-term increases in IQ or achievement if there is no continuity of educational programming. But if preschool is not sufficient without improved elementary education, is it necessary with "improved" elementary education? Bereiter (1972) interprets the results of Erickson et al. (1969) and Miller and Dyer (1970) to mean that "an effective instructional program in kindergarten can wash out preschool differences in a favorable way while a conventional kindergarten does not do so" (p. 15). It is not obvious, then, that preschools will be needed for educational purposes if elementary school curricula are constructed to consistently build upon previous learning.

Going back to the three major goal emphases of Head Start it is apparent that Head Start is no longer a community action program. The one report of Head Start's effects on institutional changes in the community was quite encouraging, but the chief emphasis of Head Start now appears to be center-based preschool projects with some parent involvement. With respect to the coordination of services, Head Start does in some cases provide diagnosis and medical treatment and it provides nutritious meals. But its major function is not seen to be that of a coordinating agency. It's major emphasis is now seen to be primarily on the education of the child. If the goals of the center-based preschool projects are considered to be permanently increasing IQ and achievement test performance, they are not effective. If their goals lie elsewhere, e.g., in cognitive and social development, then we have not or are not currently able to assess them. Given the available data, we conclude that at present center-based preschool projects are still exploratory and experimental.

## Diversify Head Start

A massive investment in general education at the preschool level has not been shown to be effective in increasing the academic achievement of Head Start participants, and effectiveness in other areas has not been adequately assessed. Therefore we propose that the implementation of Head Start as a nation-wide system of preschool centers be reconsidered.

Nevertheless, there is some indication that children have been receiving medical treatment, dental treatment, and balanced meals through participation in Head Start projects. And data show that parents are overwhelmingly positive in their attitudes toward Head Start. Zigler (1971) has estimated the number of parents who feel the program is beneficial to be approximately 95 percent. Furthermore, Zigler feels that evaluation measures have not tapped perhaps the most important effect of center-based preschools.

> Our problem is that we haven't explicitly directed and measured the kinds of changes that we could produce through preschools and through the early education efforts in the very crucial motivational system of such children. It is still my contention that if we did the proper kinds of evaluations, we could demonstrate convincingly that compensatory education will probably make its most important and most practical contribution to the lives of poor children in changing their attitudes so they all can use all of the intelligence they have and operate in an optimal manner" (1971, p. 144).

Given the absence of long-term positive effects in the academic realm, given the inability to adequately assess possible benefits in the social and emotional realm, and given the tremendous parent support of Head Start, it seems reasonable that the wholesale support of center-based preschools should be questioned but that some experimentation with center-based preschool projects be continued. There are other interventions for children of preschool age which could be implemented reasonably under the Head Start legislation and which would meet the basic Head Start guidelines. Thus an evolutionary process of diversification of Head Start toward other program formats would appear desirable. Edward Zigler, Director of the Office of Child Development, has already begun to diversify Head Start (e.g., Health Start, Home Start), and we would recommend increased and sustained efforts in this direction. There are a variety of program possibilities.

First, programs for families of preschool-age children appear promising; our recommendations concerning family intervention are presented in Chapter 13.

Second, health care in the preschool years, undeniably crucial, can probably be better addressed by changes in the health system as opposed to building special diagnostic and treatment facilities for preschool-aged children (see Chapters 11 and 13). Nevertheless, children have some health related problems (e.g., hearing, vision, physical handicaps) that can and should be treated during the preschool years. We shall discuss this below.

Third, Head Start is quite effective as a system of partial day care; as such, however, it should be evaluated by the criteria discussed in the day care recommendation of this chapter.

Fourth, to the maximum extent possible, funds should be channeled to programs directed toward specific needs of children for which there are interventions known to be effective.

Fifth, research-oriented investigations of preschool projects should be continued, including Head Start Planned Variations, which was instituted in order to investigate the effects of different curricula and instructional strategies. The Planned Variation project now has a dual service research orientation, but there are currently so many unknowns that this probably is not maximally informative. We know little about how projects different in written description differ in practice and how various curricula interact with various child characteristics. In addition, the programs are being used with children similar in their label "disadvantaged", but most likely quite diverse in their specific needs. Thus at this time it seems most appropriate to think of Head Start Planned Variation as a research project only, altering its size and design accordingly. Because the other service options are discussed elsewhere, we shall briefly discuss one option -- the focusing of programs on specific needs -- in this recommendation.

Provide programs for children with special needs. Two main criteria should be met before a program is implemented for children: (1) specific needs have been identified or are identified through screening and more detailed diagnosis; and (2) programs which are known to be effective can be implemented to deal with the specific need. We must have both effective screening techniques and effective preventive or remediative strategies. Neither is sufficient without the other. Indeed, identification and labeling of a need without follow-up aid for meeting the need can be much more harmful than never labeling the need. To implement this recommendation, then, both screening techniques and effective programs are essential.

Focusing on specific needs that are treatable with some reasonable estimate of success should maximize the probability of the programs' effectiveness. In such programs children would be included not because they are members of a low income family but because they have a specific need (or needs) for which a reasonably effective preventive or remedial project can be implemented. Essentially what this implies is individual consideration of each child in terms of the programs' ability to specifically deal with those needs: to fit the program to the child; to individualize services.

Individualization of services cannot occur without diagnosis and prescription. In concluding a review of the compensatory education literature, Gordon notes that

> "Although the concept of individual differences has been with us for a long time, individualization is underrepresented in programs of treatment and evaluation of programs. Confusing interpretation of evaluation data may occur because of this neglect and the counter-tendency to generalize too freely.

> In a few longitudinal studies where impact on individuals (or on youngsters identified as having been exposed to known treatments over time) has been investigated, emerging achievement patterns are encouraging. There appear to be insufficient studies of highly sophisticated programs of individually prescribed learning experiences to draw definitive conclusions. Yet some of the more generalized individually prescribed instructional programs do seem to be widening the range of achievement among pupils so exposed. These generalized IPI programs are probably not the answer even though they represent an advance in educational technology. The true matching of pace, content and conditions of learning to the specific characteristics of each learner is not yet a part of even our highly experimental work. Insufficient progress in the qualitative analysis of learning behavior may be partially responsible for this situation. Such analysis is clearly prerequisite to any serious effort at achieving sophistication in the individualization of instruction and learning." (1970, pp. 4-5).

Further reason for providing programs targeted on the special needs of preschool children is that diagnosis of individual needs and prescription based on that diagnosis in the preschool years can help to correct or ameliorate problems before school begins and thereby decrease the exclusion of children with special needs from regular school programs. Support for this point comes from studies of vision-impaired, hearing-impaired and learning disabled children.

Third, for certain handicaps there are critical periods after which treatment is more difficult or less effective. This is especially apparent in the case of handicaps in hearing and in vision.

Children who have special needs constitute a diverse population, comprising both low-income children and children of other income levels. Included are non-English speaking children, children with sensory, physical, and neurological handicaps, children with learning disabilities and with emotional problems. Yet even these categories do not indicate the specific needs of the children -- only that they probably have needs which should be more precisely identified. Blatt has offered a definition of the child with special needs: "a child who, because of temporary or permanent adjustment difficulties arising from intellectual, psychological, emotional, physical, perceptual, socioeconomic, cultural or linguistic factors or any combination thereof, requires special services in order to achieve the fullest possible development of his total personality." The label "children with special needs" does not limit services in the manner that a more categorical label might, nor does it imply a permanent identification and label. The effects of labeling and the misuse of labeling are justifiably coming under scrutiny (Blatt, 1971; Jones, 1972; Task Force on Children Out of School, 1971), and it must be emphasized that labels are useful and justified only insofar as they are integrally tied to some service which will meet the need indicated by the label.

At this time we know better how to diagnose and treat certain problems than we do others. The priorities for screening and service programs should reflect the extent of this knowledge, while the priorities for research should reflect serious needs for which no known, effective treatments exist. For non-English speaking children, preschool programming can serve as a bridge into the English-speaking school system. The literature on the handicapped suggests that screening procedures and programs (for child and parents) have been developed for vision-impaired, hearing-impaired, and physically and neurologically handicapped children. Screening and intervention techniques are less well developed in the area of learning disabilities, communication disorders, and emotional disturbances, and thus more research is needed in these areas before wide-scale service programs are implemented.

Prevalence. The census data on children with special needs are poor, and estimates vary widely (National Advisory Committee on the Education of the Deaf, National Advisory Committee on Handicapped Children, Council for Exceptional Children Policy Commission).

Estimated percentages and numbers of school-age children are given in Table 12.1. Those are not the only estimates available. Martin (1971) estimates that there are one million infants and preschool children with special needs. Weintraub (1971) gives a 2.4 million figure for ages 0 - 6. A breakdown of 0 - 4 year-old children with special needs according to the categories used by the Bureau of Education for the Handicapped yields the following prevalences:

TABLE 12.2

| | |
|---|---|
| Speech impaired | 327,900 |
| Emotionally disturbed | 180,800 |
| Mentally retarded | 309,200 |
| Learning disabled | 93,700 |
| Hearing impaired | 46,800 |
| Deaf | 7,000 |
| Crippled and other health impaired | 46,800 |
| Visually impaired | 9,400 |
| Multihandicapped | 5,100 |
| | 1,026,700 |

Source: Bureau of Education for the Handicapped, 1970

Such estimates of prevalence, in the preschool population especially, are open to question because of the absence of systematic screening and the paucity of diagnostic instruments for this age range.

## TABLE 12.1

### Estimated Percentages of Handicapped Children

| | |
|---|---|
| Speech impaired | 3.5% |
| Emotionally Disturbed | 2.0 |
| Mentally Retarded | 2.3 |
| Learning Disabled | 1.0 |
| Hard of Hearing | 0.5 |
| Deaf | 0.075 |
| Crippled or other health impaired | 0.5 |
| Visually Impaired | 0.1 |
| Multihandicapped | 0.06 |
| TOTAL | 10.035% of school age children from 5 to 19 years |

### Number of Handicapped Children as Reported by States

| Type of Handicap | Fiscal Year 1968 | Fiscal Year 1969 |
|---|---|---|
| Mentally retarded | 1,503,000 | 1,360,737 |
| Hard of hearing and deaf | 286,200 | 316,456 |
| Speech impaired | 2,141,600 | 2,180,589 |
| Visually handicapped | 75,800 | 66,679 |
| Emotionally disturbed | 800,000 | 767,108 |
| Crippled | 305,400 | 192,662 |
| Other health impaired (including learning disabilities) | 759,900 | 1,089,817 |
| Multihandicapped | 89,100 | 35,918 |
| National total | 5,961,000 | 6,009,966 |

Source: Bureau of Education for the Handicapped, 1969, 1970.

The Bureau of Education for the Handicapped also reports that 62% of all school-aged children with special needs are not being provided with educational services (Table 12.3). The percentage of infants and preschoolers not receiving services is certain to be much higher since federally-funded programming for specifically this age group did not begin until 1968 (Handicapped Children's Early Education Program, P. L. 91 - 230, Part C, Title VI). Only 31 states with E.S.E.A. Title VIa money had preschool plans in 1968; 16 of the 31 planned to spend less than $22,000 (House Hearings of the Committee on Education and Labor, July 1968). Less than 8% of E.S.E.A. Title VI funds is spent on preschool projects (Lavor & Krivit, 1969). At the same time these children are often excluded from other preschool programs like Head Start (Child Development Act Hearings, House, June 1971). It is estimated that less than a tenth of preschool children with special needs are now being served (B.E.H., 1971).

The total number of children from 3 to 18 years of age who need some type of bilingual education is estimated to be around 5 million. Table 12.4 presents a breakdown of these 5 million according to their language background.

Current Screening Techniques and Programs for Children with Special Needs. The screening essential for identification of children with special needs can take place at various times in the child's preschool years and may cover different aspects of development: sensory-motor, language, cognitive, socio-emotional, physical. Health screening techniques are the best developed at this time, but they are not yet perfected and are better developed in some areas than in others (e.g., PKU is easier to detect than hearing impairment). It is not that difficult to identify a child who cannot speak English, on the other hand. Identifying an "at risk" population, which involves a battery of medical and psychological tests is more difficult; furthermore, the consequences of being "at risk" are not as certain. However, a number of longitudinal projects have demonstrated the efficacy of prenatal health screening and later developmental screening at ages of 18 months to 3 years in identifying children who are "at risk" in terms of later school success (Denhoff et al., 1971; Jordan, 1971; Werner, Brerman & French, 1971). Screening for different needs has different priorities depending upon the probability of an accurate diagnosis, the availability of remediation, and the risk of late identification. It would seem reasonable to screen universally for some needs, with screening for other needs depending upon the time and cost required balanced against the probability of effective remediation.

Programs for preschool children which are currently being implemented include (1) parent education and home management programs beginning in early infancy and extending until school entry, (2) early childhood education programs for children aged 3 - 6, and (3) preschools which integrate children with different special needs and normal children in the same classrooms. Parent education for special children has included (a) the provision of information via literature and classes, (b) the demonstration of educational methods for use in the home via observations of professionals working with children in centers and/or in the home, (c) observations

TABLE 12.3

Handicapped Children Receiving and Not Receiving Special Educational Services in 1969

| Type of Handicap | Number of Handicapped Children | Receiving Services | Not Receiving Services |
|---|---|---|---|
| Mentally retarded | 1,360,737 | 52% | 48% |
| Hard of Hearing and Deaf | 316,456 | 21% | 79% |
| Speech impaired | 2,180,589 | 51% | 49% |
| Visually handicapped | 66,679 | 34% | 66% |
| Emotionally disturbed | 767,108 | 13% | 87% |
| Crippled | 192,662 | 33% | 67% |
| Other health impaired | 1,089,817 | 15% | 85% |
| Multihandicapped | 35,918 | 26% | 74% |
| National totals | 6,009,966 | 38%<br>2,258,395 | 62%<br>3,751,571 |

Source: Bureau of Education for the Handicapped, 1970

TABLE 12.4

Children in Need of Bilingual Education Programs

| Ethnic or Language Background | Estimated Number of Children 3 to 18 Needing Bilingual Education |
|---|---|
| All | 5,050,000 |
| Spanish-dominant | 4,150,000 |
| Chicano | 3,045,000 |
| Puerto Rican | 776,000 |
| Other | 328,000 |
| French | 380,000 |
| Portuguese | 217,000 |
| Japanese | 11,000 |
| Chinese | 140,000 |
| American Indian | 130,000 |

Compiled from:

(1) U. S. DHEW, Title 7, Division of Bilingual Education, June, 1972.

(2) Andersson, T. et al. Bilingual Schooling in the U.S., Vol. II, U.S. DHEW, Office of Education, 1970.

of parent-child interactions by professionals who provide assistance at centers and/or in the home, and (d) combinations of these three. In home management programs parents are given the major responsibility for the education of their child, but professionals observe the child and his family at home, demonstrate ways of handling the child, and provide the technical aspects of education. It should be noted that the terminology here is somewhat different from that used in the review of family intervention projects. Because we have not reviewed the effectiveness of various means of working with the family for children with special needs, we shall use the term "parent training" as a generic term for working with the family, leaving it to future reviews to discuss which means are most effective.

a. Hearing-impaired children. There is general agreement that deafness and other major hearing losses should and can be detected in earliest infancy (Johnston, 1967; Griffiths, 1967; Babbidge, 1965) even though screening techniques have clearly not been perfected.

However, retrospective reports such as that of Johnston (1967) indicate that up to 50% of deaf children are not identified until 8 - 48 months of age. This is true in spite of a number of well-identified etiological factors such as maternal rubella, hereditary factors, blood incompatibility, childhood meningitis, and maternal influenza. The importance of early detection of auditory impairments lies in the major role that hearing plays in language development. Often children whose language development is delayed because of an undetected hearing loss are labelled mentally retarded or emotionally disturbed, further contributing to their adaptive problems.

The earliest recognition of the need for parent training and preschool programming came in education of the deaf. Although most preschool programs for children with special needs exist for hearing-impaired children (Gallagher, 1968), less than one-half of all children who need the programs are receiving them (Babbidge, 1965). The neglect of hearing impaired children until they reach school age can result in extreme language deficits and socio-emotional problems (Varwig, 1966) and below average achievement levels (Vernon, 1967a,b; Babbidge, 1965). Numerous educators have asserted that the most favorable time for intervening in a hearing-impaired child's life is between birth and age four (Babbidge, 1965; Calvert & Baltzer, 1967; Griffiths, 1967; Harris, 1967; Luterman, 1967, 1971; Szymanska & Powlowski, 1967). Increasingly, the emphasis is on parent training beginning at the birth of a hearing-impaired child with special classroom preschool programming commencing around age two (Babbidge, 1965; Conner, 1971; Harris, 1967; Lundstrom, 1967; Luterman, 1967, 1971; Simmons, 1966, Szymanska & Powlowski, 1967). The John Tracy Clinic sponsors a correspondence course that offers a variety of parent training techniques (Jones, 1968).

Some recent evidence supports the efficacy of a combination of parent training and preschool programming for deaf children. Conner (1971) at the Lexington School for the Deaf has found that intensive auditory stimulation and parental guidance between one month and two and one half years of age lead to later gains of 40 - 50 db at ages 5 - 6. There are subtle differences in both receptive and expressive speech as well as behavior changes. Such differences can make integration into public school classes possible, allowing deaf children to live with their families and to interact with hearing peers rather than being placed in residential schools. Both Luterman (1967, 1971) and Calvert (Calvert & Baltzer, 1967; Calvert et al., 1972) have reported that their approaches utilizing a combination of parent training and classroom programming are successful in helping both families and children to benefit from available resources.

b. Visually-impaired children. Visual impairments are somewhat harder to detect than hearing impairments at an early age unless they are severe; even then they are not always detected. Several major preschool visual screening projects (Savitz, 1964; Treganza, n.d.) have found screening to be useful as early as 30 - 36 months of age even though as many as 50% of the children of this age are not testable. Visual screening at early ages can detect progressive problems such as lazy eye blindness (amblyopia exanopsia) which cannot await later detection and treatment.

Preschool programming for severely visually-impaired children and blind children has not received as much attention as has programming for the hearing-impaired. In general, visual impairments interfere less with cognitive and language development than hearing impairments. In consequence, educational programming has generally not begun until school age, or emphasis has been on socio-emotional adjustment and self-help skills rather than education. Recently, however, there have been increased efforts by professionals to educate parents beginning immediately after the birth of a severely impaired child (Fraiberg, 1968); to integrate blind children into regular preschool and school programs (Dickinson, 1966; Maloney, 1966; Moor, 1962); and to educate severely visually-impaired children as soon as possible to maximize the use of whatever vision they possess rather than to "sight save" (Barraga, 1966; Halliday, 1966).

c. Children with neurologic, orthopedic, and multiple impairments. Children with physical handicaps other than auditory or visual impairments include those who have neurologic and orthopedic impairments. These impairments constitute a heterogeneous group of disabilities -- poliomyelitis, cerebral palsy, congenital defects, muscular dystrophy, cystic fibrosis, etc. These disabilities have frequently been considered medical rather than educational problems. Except where the children have been multihandicapped, early education has emphasized self-help, socialization, and rehabilitation in special day classes. Children with cerebral palsy, who are often multihandicapped, are an exception, for recently a combination of parent training and special child services have been offered, beginning as soon as possible after birth (Weider & Hicks, n.d.).

Many children with special needs directly related to health problems have multiple handicaps, i.e., they have deficits in more than one area of functioning. Multiple handicaps are characteristic of approximately 25% of all blind children (Dauwalder, 1964); 40 - 51% of all cerebral palsied children are classified as mentally retarded (Holden, 1952), about 30% have defective vision and 13% have defective hearing (Hopkins et al., 1954) and 70% have speech impairments. Similarly, deaf children have a higher incidence of emotional disturbance and behavior deviations than normal hearing children (Varwig, 1966). These children and their families obviously need more help than those with singular handicapping conditions, but because of traditional categorical program emphases, they are the most likely to be excluded or to be placed in a partially inappropriate program (Babbidge, 1965; Harley, 1966; Moor, 1966).

d. Children with learning disabilities and emotional disturbances. The detection at early ages of learning disabilities and emotional disturbances is more difficult than the early detection of health-related problems such as physical disabilities, deafness, and blindness. The former are often dependent on the child's ecological situation and are indicative of interactive problems between the child and the task situation (Adelman & Feshbach, 1971; Keogh, 1971; Rhodes, 1970). Frequently they are not directly related to observable physical deviations from the norm and they may be temporary in nature. In these instances the problems associated with labeling are acute, especially since screening techniques in infancy are far from perfected. Recently the trend has been away from standardized psychological testing and toward behavioral descriptions or child profiles of strengths and weaknesses which function as evaluations. These have the explicit purpose of assisting programming for the child's special needs.

Traditional categories of handicapped or exceptional children have not included a heterogeneous group of children who encounter difficulties in school. These children fail for a variety of reasons but all of them exhibit developmental discrepancies in abilities. These children are the "brain injured," the "minimal brain dysfunctioned," the "communication disordered," the"dyslexic," etc. Recently they have been collectively labelled the "learning disabled". Kirk (1972) reviews a variety of definitions which pertain to this group and concludes that the common areas of agreement are that

> 1. The learning problem should be specific and not a correlate of such other primary handicapping conditions as general mental retardation, sensory handicaps, emotional disturbance, and environmental disadvantage.
>
> 2. The children must have discrepancies in their own growth (intraindividual differences) with abilities as well as disabilities.
>
> 3. The deficits found in a child must be of a behavioral nature such as thinking, conceptualization, memory, speech, language, perception, reading, writing, spelling, arithmetic, and related abilities.
>
> 4. The primary focus of identification should be psychoeducational.
>
> (p. 44)

Often these are children who can be identified as "at risk" at birth as the result of a constellation of factors (prematurity, prenatal complications, etc.) rather than on the basis of results of specific screening tests. Later, around age three, there is some possibility of their identification by certain discrepant behavior and skill patterns. Unless the discrepant developmental patterns which these children display are recognized, many of them will encounter difficulties in school. Therefore preschool programming might be used to minimize their chances of failure. Denhoff et al. (1971) describe a successful screening and educational program which begins at birth and continues through school entry. Classroom management techniques and special instructional strategies are developed before the child enters regular public school classes, thus minimizing the chances of failure and associated emotional difficulties.

The currently most commonly used approaches to the treatment of the emotionally disturbed or behavior disordered preschool child are (1) observational nursery schools which provide feedback to the mother and (2) a combination of mother therapy, child therapy, and therapeutic nursery school attendance (Brandt, 1967; Furman & Katan, 1969; Taylor, 1969). Behavior modification techniques are increasing in popularity (Bijou, 1968), however, and therapeutic nurseries are focusing more on the dynamics of social interaction and less on the child's intrapsychic dynamics (Bilsky, 1970).

e. Mentally retarded children. Screening for "mentally retarded" children during the preschool years is difficult. Children can be identified who display developmental delays, but unless there is a clearly determined defective biological condition (e.g., various forms of genetic defects, obvious organic damage, etc.) or unless the delay is extreme and ubiquitous, it is impossible to know if the delays are permanent or temporary (Ames, 1969a, 1969b; Illingsworth, 1960; Oppenheimer, 1965). In this area the problems of early labeling of children are acute. Therefore children who are not severely delayed (educable mentally retarded) are generally not identified until school age (Blatt & Garfunkle, 1969).

Because of problems in identifying mentally retarded children, preschool programming for them has been limited. Those who are not severely delayed are generally not identified until school age, and then by school failure; those with more severe problems (trainable mental retardates) are either institutionalized or kept at home with or without attending private preschools. As noted in Chapter 3, various preschool programs (Fouracre et al., 1962; Blatt & Garfunkel, 1969; Kirk, 1958; Skeels & Dye, 1966) have attempted to accelerate the growth of developmentally delayed children. These have largely been experimental efforts, with the exception of Head Start which is not specifically targeted at children labelled mentally retarded. These programs have largely failed at permanent acceleration of development. They have been most successful where children have concommitantly been removed from severely depriving environmental conditions.

f. Non-English speaking children. Non-English speaking children refers to all children who do not speak English or one of its dialects. There are approximately five million such children from 3 to 18 years of age who therefore need bilingual education. Unless the public school system begins offering instruction in different languages, the non-English speaking child must learn English in order to benefit from instruction. Preschool projects offering bilingual programs are being developed to provide the non-English speaking child with English language skills before he begins regular public school. Bernbaum (1971) has reviewed research and project descriptions on early education projects for non-English speaking children, and she also reviews tests used to estimate to what extent a child can use and comprehend two or more languages. Cervenka (1968) has developed a test of basic language competence in English and Spanish for preschool age children, and there are several other tests which have been developed by various bilingual projects to assess their effectiveness. Bernbaum described a number of bilingual projects, but she did not summarize their results.

g. Summary. Screening techniques and intervention programs are best developed for special needs arising from specific physical health problems -- hearing, visual, neurological, and orthopedic impairments. For a number of reasons, both are less well developed for special needs not clearly related to physical health deficits. Behavior disorders, mild emotional disturbance, and developmental delays may all be temporary in nature and their identification is heavily dependent upon ecological variables. Similarly, learning disabilities have traditionally been defined by school failure not related to the above special needs. However, attempts to identify this population before they fail appear to be increasingly successful (de Hirsch, Jansky, & Langford, 1966; Denhoff et al., 1971; Kirk, 1972). Wide-scale use of screening and the provision of programs should follow the extent to which successful screening and programming have been developed for particular special needs.

Integration of children with different needs. Traditionally programs for children with special needs have been categorical; children with the same identified handicap have attended programs together. Programs dealt only with a singular group of handicapped children (e.g., the hearing impaired or the visually impaired) and did not mix children with different special needs or with multiple needs in the same class. This resulted in the exclusion of many children from programs or the inappropriate inclusion of other children via inappropriate or single-need labelling. This trend was reinforced by the categorical nature of program funding. But given the dispersion of children with the same or similar special needs and the recognized value of children remaining with their families during childhood (see Chapter 3), it is important to fund preschool projects which permit the inclusion of children with differing needs within the same program. This type of mixed preschool programming is especially possible in the case of health-related special needs where parents can be trained as the primary educators of their infants and preschool children via parent training projects using itinerant teachers (Calvert & Baltzer, 1967; McConnell, 1968; Northcott, 1970, 1971). In this case preschool projects for children with special needs could be provided by integration of the children into regular day care and nursery projects with the aims of relieving family stress and helping children with special needs to adjust to school-like situations. The use of additional outside services, itinerant teachers, lower child/staff ratios, and the selection of child-care workers who are capable of dealing with special children would enable integration of normal children and children with special needs.

Several recent efforts to integrate children with special needs into regular preschool programs have been reported in the literature. Integrated preschools are recommended as socialization mechanisms for children with singular defects who will not enter formal special education until school age (Lively, 1965; Moor, 1962; Payne, 1969; Sennet, 1970; Unger, 1968), or they are recommended as a viable means to provide models for developmentally delayed children and to educate young "normal" children and their families to tolerate and understand differences (Bricker & Bricker, 1971).

Furthermore, preschool programs -- parent training and classroom preschool projects -- along with informed public school teachers can enable many children with special needs to attend school with their peers in a non-segregated situation. Both deaf (Conner, 1971; Lundstrom, 1967; Szymanska & Powlowski, 1967) and blind (Halliday, 1966; Brown et al., 1967) children, who have traditionally been educated in residential schools, have been integrated into the public schools after attending special preschool projects. Such integration is less expensive, permits the child to remain with his family, and keeps him from being excluded from much of everyday life. Preschool projects have also been used to help emotionally disturbed children adjust socially (Bijou, 1968; Bilsky, 1970; Taylor, 1969), but there are no data regarding the subsequent placement of children. Special preschool classes can also be used with the learning disabled child to provide an environment in which the child can learn skills which permit him to handle the regular classroom environment (de Hirsch, Jansky, & Langford, 1966; Denhoff et al., 1971; Kirk, 1972).

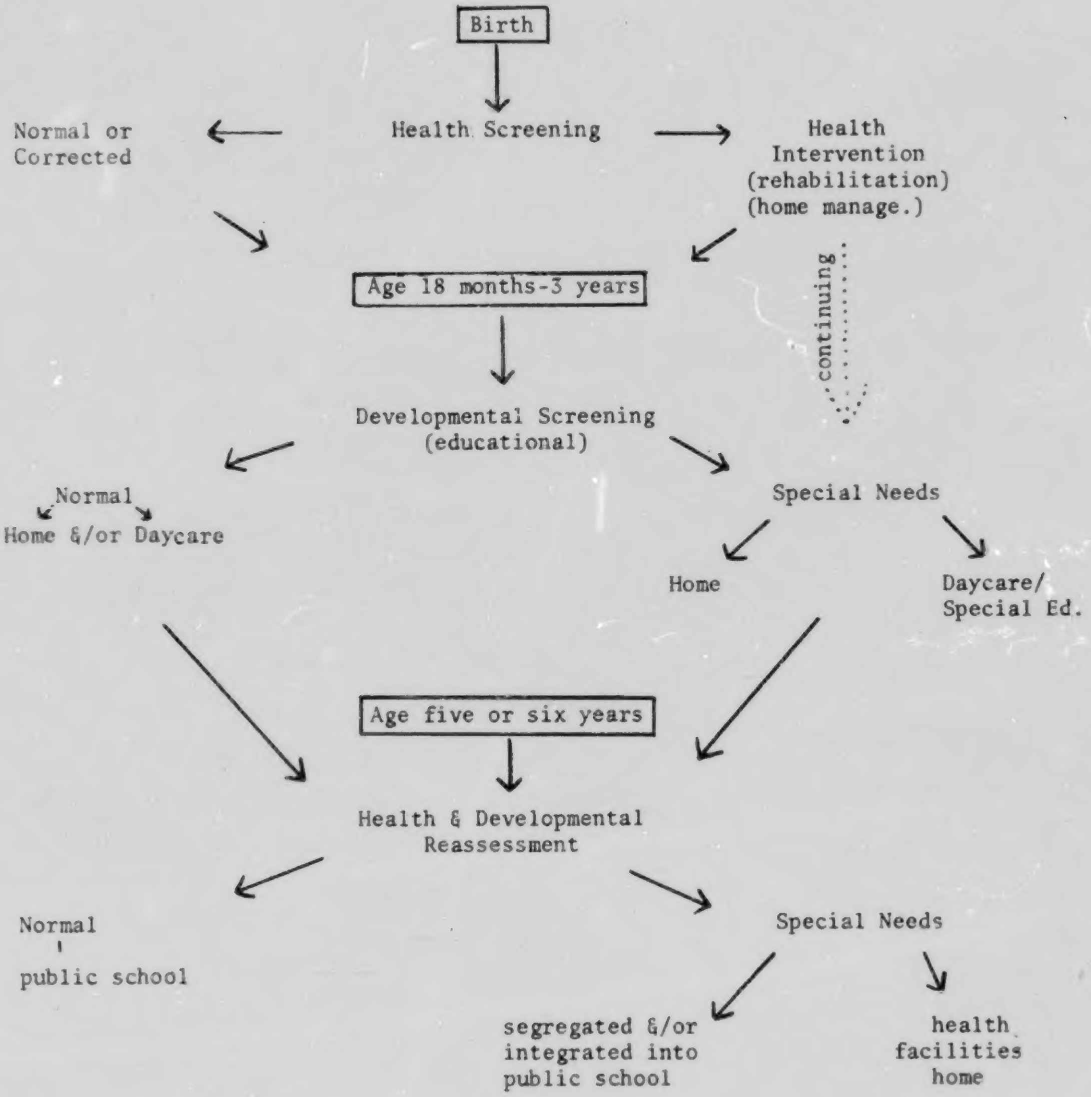
## Recommendations

I. Diversify Head Start away from the present primary investment in center-based preschool education.
  - --Broaden its focus (to aspects of child development in addition to the cognitive and academic), its format (parent training, various projects targeted to special needs), and the range of indices used to indicate its effectiveness.
  - --Continue research on the effects of center-based preschool education.
  - --Conceive of Planned Variation as research only, and alter its size and design accordingly.

II. Implement screening programs for all children under the conditions given below. A possible timetable for screening is presented in Table 12.5, which suggests screening followed by appropriate treatment at birth, 2-3 years, and kindergarten.

TABLE 12.5

A Childhood Screening Timetable


Birth
Health Screening
Normal or Corrected
Health Intervention (rehabilitation) (home manage.)
continuing
Age 18 months-3 years
Developmental Screening (educational)
Normal
Home &/or Daycare
Special Needs
Home
Daycare/ Special Ed.
Age five or six years
Health & Developmental Reassessment
Normal
public school
Special Needs
segregated &/or integrated into public school
health facilities home

--Screening should be conducted by appropriately-trained personnel (not necessarily pediatricians) who work within a health system with comprehensive referral capabilities. The health recommendation in Chapter 13 of this report gives more detail concerning health referral systems and manpower.
--Screening for and identification of needs should occur only when programs to meet the needs are available.
--Screening priorities should be based on diagnostic sophistication, the risks of late identification, and the availability of appropriate programming.

III. Provide individualized services for preschool children with special needs as early in the child's life as is beneficial. Services should in most cases include parent training.
--Currently we seem best able to provide programming for preschool children with sensory and physical needs and for non-English speaking children. Programs should be implemented for such children.
--Focus on research and development of programming models where our knowledge is inadequate for current implementation (e.g., in the areas of learning disabilities, behavior disorders, or emotional disturbances.
--Implement bilingual preschool projects for non-English speaking children to prepare them for the regular school system.
--Adjust categorical funding at the programming level to permit integration of children with different special needs in the same preschool projects, while at the same time ensuring the continued individuality of the services provided.
--Integrate children with special needs into regular school programs as much as possible, especially using special preschools to permit later regular school attendance.

## Day Care Recommendation

Over the last few years there has been a great deal of public debate over the prospect of federal involvement in a national day care system of some sort. A number of arguments for such a day care system have been offered, specifying possible benefits to the child, the family, and the society as a whole. The arguments are not independent, so it would be difficult and indeed misleading to restrict analysis of this question to child benefits alone.

In previous chapters, we have reviewed available evidence that might bear upon a developmental function of day care. Chapter 9, Day Care, reviewed existing data on known effects to children of infant care programs in the 0-3 age range. The review of that chapter was restricted to that age range because it was felt that the possible stimulative value of developmental day care in the 3-5 year age range was encompassed by Chapter 8, reviewing preschool intervention, and the value of day care at older ages by Chapter 7, reviewing the literature on school intervention in the early elementary age range. This is not an ideal way to estimate the developmental possibilities of day care, but it is the only available way at present. Although there has been considerable use of day care in this country and abroad, that use has not generated data on day care effects on children. Previous use of day care has been largely "custodial" -- that is, it has been guided by the desire to provide safe and pleasant child care. Consequently, there has been very little study of the effects of day care upon child development.

We should note at the outset that this discussion concerns primarily 0-6 daycare. Care of older children 6-9 is of a very different nature. It is part time. It can assume much more responsibility on the part of the child, and thus be more custodial. Most importantly, the risks involved in not constantly supervising a six to nine year-old are dramatically lower than those in not supervising a 0 to six year old. Consequently, the costs and needs for such care are generally lower.

Our conclusions in this recommendation section will be directed primarily towards day care in relation to benefits for children. In the following discussion, each of the other major arguments for a federally sponsored day care program will be presented and discussed, and conclusions will be drawn where appropriate.

There are five major arguments for publicly-supported day care at this time.

Child Development. Day care will provide cognitive and social stimulation for disadvantaged children superior to what they can now obtain in their home environment.

Family Support. Day care is now needed because a significantly large risk of child neglect now exists in many families with working mothers or where stresses are present. There are many situations, both temporary and permanent, in which children do not receive the care they need. Day care is needed to provide that care.

Family Replacement. Day care is now needed not only for poor people but for the middle class as well. The roles of families in our society are changing, and the roles of women are or should be undergoing change. The trend of social change is towards placing the responsibility for care of children increasingly in the public domain.

Fiscal. Day care will offer an economy for society because it will release women now on welfare and AFDC rolls for work. Expenditures for day care will pay for themselves in reducing these public assistance expenditures.

Screening and treatment for special needs. Day care centers, if widely established, can serve a useful auxiliary function by providing screening for health, nutrition, and family problems and by offering referral and/or treatment for such problems.

The discussion to follow will be oriented towards an analysis of these arguments, in terms of both day care and non-day care responses.

Most of the general discussion has focussed on day care centers, facilities other than homes to which children are brought for care. For a complete discussion of day care issues, at least two other forms of child care must be kept in mind: day care homes and homemaker services. The former are private homes in which at least one adult takes care of several children. The latter are services provided in the child's own home. Federal regulations cover licensed centers and homes (see appendices IIa and IIb), as do many states' laws.

## Child Development

Developmental effects on children are rarely cited by themselves as a basis for a policy of federally supported day care, yet the possibility of such effects is either an explicit or implicit part of all other arguments. Two opposite points of view are involved: day care is good for children's development because it stimulates cognitive and social development, and day care is bad for children's development because (in very young children) it offers risks to mother-child attachment and it increases the probability of infectious disease. (More detailed discussion of the findings involved in the arguments can be found in chapters in Parts I and II of this report). The argument for developmental day care is based on the thesis that the first six years of a child's life are critical in terms of the benefit he or she can derive from cognitive stimulation and various kinds of support. It is argued that social and economic viability in later years can be greatly enhanced; the line of reasoning is that such stimulation and support will increase IQ and self-image and thereby ensure better options in later life.

There are two arguments that day care would be detrimental to a child's development. In the first, it is said that early substantial replacement of the mother by a day care facility will result in impaired mother attachment. This, in turn, is said to raise the possibility of general social attachment problems later in life. It is estimated that the critical period for such attachment patterns to form lies between the ages of six to nine months and five years (see, for example, Bowlby, 1951).

Secondly, it is argued that unlicensed day care in effect exists without laws and even safety standards and that such care (a good majority of that provided today) represents a potential danger to children due to health hazards. In addition, it is argued that groups of children will help spread infectious diseases (see, for instance, Keyserling, 1972, for discussion of such hazardous conditions and Keister, 1970, for discussion of increased infection). We address the question of standards for day care further on.

Discussion. It has not been possible to conclusively support one or another of the arguments. Much of the support in each case is testimonial, and what evidence there is rather inconclusive. The data from day care centers which have attempted to measure child development under their programs are not very encouraging. Only one of four programs reviewed in Chapter 9 shows dramatic gains, and these are short term (no long-term tests have been made). This speaks not to the existence of such effects, but rather to present inability to find or measure them. On the other hand, no program was found to be detrimental to children's development.

The convertibility of stimulation into better life options can also be questioned. The studies on which belief in such effects is based (see Chapters 3 and 4) are almost all correlational in nature; consequently, the causal chain is hypothetical. For example, it is not known whether improving the cognitive stimulation of a child in fact improves the child's IQ, or whether an improved IQ will actually lead directly to a better job status (see Jencks, 1972, in press).

With respect to the argument that day care is bad for a child's development, the data are no more helpful. There is simply not enough (fuller discussion appears in Chapter 9), and there is evidence that increased dissemination of diseases can be dealt with easily (Keister, 1970).

It seems appropriate at this point to briefly discuss the rather complex question of quality and adequacy in day care. Throughout the rest of this section, our recommendations for day care of one sort or another refer to Federal standards, present and proposed forms of which appear in appendices IIa and IIb. The reason we have used these standards is because no other general ones exist (several states and cities have standards of their own). It is not our intention to imply that day care which does not meet such standards cannot serve the purposes for which day care might be useful, but rather to emphasize the fact that very low levels of care would not address the problems discussed. The reasons for this have more to do with public perception of the effects of various levels of care on children than with their actual effects.

Most studies of day care quality and acceptability arrive at a three level scale corresponding very roughly to distinctions between minimum, adequate, and desirable care. Desirable care is compared to that a child would receive from a mother with several children to look after. Few definitions are more specific than that of the Children's Bureau (1968): "the full range of general and specialized developmental activities suitable to individualized development". It should be noted that just what might constitute such a full range of activities is a matter of rather personal judgement; there is no generally accepted theory of what such activities must be. Although mother-comparability appears to be an explicit standard, in fact it is difficult to generate a description of the positive aspects of desirable motherhood. Minimum care, on the other hand, is defined as "the level essential to maintain the health and safety of the child, but with relatively little attention to his developmental needs".

There is little unanimity on the definition of the middle level, "adequate" care. In general, it is seen as including some basic developmental components but lacking the individualized nature of desirable care. Complexity arises in defining that point between minimum and adequate care at which it is reasonable to assert that the risks of the care program harming the child are negligible. Various scales are used to measure service: staff/child ratio, staff training, utilization of various services (health, for instance), and type of environment. Except in the case of physically dangerous environments (sharp objects, unprotected stairwells, plastic bags, etc.) it is difficult to describe levels on these scales at which harm is probable. Parents, however, react not only to child safety but also to child happiness, and it is this added dimension which probably must determine the minimum level of care which will publicly be termed 'adequate'. It might well be asserted that the evidence supports no standards calling for anything more than a safe environment; however, such an assertion ignores the ambiguous underlying motivations for such standards. Such an assertion would be valid, although difficult to implement, if child outcomes were of primary concern. However, most discussion of standards is in the context of welfare reform/work incentive programs, discussed further on, in which day care would be essentially mandatory for poor children. Such a context also includes families whose caregivers must work for other, non-programmatic reasons. In all of these cases, standards are proposed not to protect the child, but rather to counter the argument that children in such day care are penalized for their parents' socioeconomic status by being denied the benefits of family care (in addition to the existing penalties of low SES). Standards, therefore, are developed in terms of family equivalence rather than in terms of developmental minima (the levels of care below which children might be harmed). The question of such developmental minima is not trivial, but it is simply not possible without further controlled experimentation to know what they are or on what scales they are measured. Even if an exact statement of such standards were possible, it would not address the real issue in public day care regulation, that of family equivalency. In non-mandatory care, the caregiver is voluntarily using day care services; the option to change (in the traditional caveat vendor sense) seems to represent a form of non-specific regulation of standards. Subsidized care must also be responsive in this way, as empty day care facilities provide no service (see Ogilvie, 1972; Keyserling, 1972).

There is some evidence, as common sense would dictate, that poor orphanage or other institutional care -- high density, apathetic staff, unhappy children, poor environment -- leads children to become passive and withdrawn. The goal of setting minimum standards is to prevent such occurrences; the argument above does not contradict this point, but rather suggests that higher standards are the natural result of the underlying needs. Nevertheless, research should be mounted to better understand the concept of minimum care.

Present and proposed Federal standards for day care require a high level of care on all scales. Our conclusions in this and other sections depend only on the assumption that day care will be adequate for the child in the parents' view, and are unchanged by the introduction of some other such set of official standards. The fiscal argument is somewhat more sensitive to such changes, as will be seen in that context.

It is apparent that any proposal for federally supported day care neither gains nor loses strength on the basis of developmental arguments. This is not to say that child development is irrelevant to day care, but that its connection is essentially unknown. To summarize:

I. Day care meeting some carefully considered standard of basic adequacy will not be detrimental to children's development.

II. There is virtually no way at present to know what must be added to such basic care so as to positively affect children's development generally.

III. Research is needed to more definitely understand the potential and present effects of day care on children; in its absence, substantial investment in developmental day care appears inadvisable.

We have given little evidence for or against these statements; this reflects the dearth of such evidence. It can be argued that these conclusions rest on many years of noncontroversial experience with various kinds of day care. This is a valid argument for a continuation of the present extent of day care services, but any proposal for significant change must rest on more solid evidence.

## Family Support

This argument is based on a situation in which a family, for reasons either totally or temporarily beyond its control, is unable to provide the time or sometimes the competence to care for its child or children. Various specific situations qualify: both parents must work, leaving the child alone or in incompetent care, or crises and stresses of various sorts might result in neglect of child care. Several of these situations will be discussed in roughly decreasing order of their seriousness.

Nonsupervised children. The existence of such cases represents the most conspicuous and uncontested need for some sort of supervision and care. As a result, several studies have attempted to describe the number and circumstances of such children.

Spindler and Low, in a 1965 Current Population Survey study (reissued in 1969) surveyed mothers who worked full or part-time. Of the 3.8 million children under six of such mothers, they reported that at least 18,000 looked after themselves when their mother was out. More specifically:

| | | Mother's workload | |
|---|---|---|---|
| | | full-time | part-time |
| child's age | 0-3 | 2,000 | 4,000 |
| | 3-5 | 5,000 | 7,000 |

(Spindler and Low, 1969, pp. 70-71)

The exact significance of these figures is unclear, however. Does, for instance, nonsupervision of a one year old imply no human contact, or that someone comes in a few times during the day to feed the child but does not watch over it? [the actual survey category was "child looks after self"] In any event, the actual problems nonsupervision can cause for a child are numerous. The most severe danger is of otherwise preventiable or reversible accident, such as plastic bag suffocation, injuries, or poisoning. Other problems, which are largely developmental, are less relevant to this argument than to that for developmental day care, which has already been discussed. They do not change the basic conclusion that an unsupervised child must be cared for.

Incompetently supervised child. This situation is generally said to arise in one of two ways: The child is left home in the care of a perhaps only slightly older sibling, or the child is under some sort of very poor group day care. When no competent parent or sibling exists, the situation merits intervention like that suggested below in stress conditions.

The discussion of day care adequacy above suggested the difficulty of defining this situation precisely. It would appear that the best way to ensure competent or adequate group care is to identify those areas or situations where the choice of day care arrangement is essentially involuntary and take steps to ensure that parent dissatisfaction results in changing the nature of that care. If a mother is dissatisfied with a child's care, there should be satisfactory alternatives available. Voluntary care is presumably already so affected and can probably be assumed adequate.

In each of the preceding situations, it might well be asked why the mother or father cannot care for the child. In this regard, Mary Keyserling points out that

> Most working mothers seek jobs for compelling economic reasons. Let us look first at the income situation in 1970 of the 3.9 million families headed by men, with children under the age of six and with mothers in the labor force as of March 1971:
>
> > Without the mothers' earnings, 7 percent of these families would have been in abject poverty, having to make do with less than $3,000 a year.

> > Without the mothers' earnings, an additional 33 per cent these families would have had to struggle to get by on incomes of between $3,000 and $7,000 a year.
> >
> > Without the mothers' earnings, an additional 33 per cent of these families would have had incomes of between $7,000 and $10,000 a year.
> >
> > Combining these three income brackets, without the mothers' earnings, about three quarters of these families would have had incomes of less than $10,000 a year.
>
> The earnings of mothers lifted many families out of poverty and made it possible for large numbers of others to avoid the hardships of economic deprivation. (1972, p. 11)

There are clearly other reasons; this one is cited by way of example. The more specific case of welfare mothers will be discussed further on.

Family crises or stresses. Two classes of situation are included here. Crises have a short-term effect on family functioning, perhaps three months at most. Stresses are of longer duration, and can result from complications in a crisis situation.

The need for care in crisis situations varies from case to case. For example, the mother might have to care for a sick father, leaving the child temporarily unattended. Acute emotional problems might impair family functioning, as might temporary economic problems. The purpose of any intervention is to care for the child until the situation returns to normal, or to see that a vicious circle of parent problems causing child problems and vice versa does not start.

The second class of cases involves family stress. Here the child and the caregiver may have a relationship worth preserving, but the caregiver is simply unable to provide adequate care. Reasons might include low intelligence, lack of preparation, too many children, or various disabilities and handicaps. Day care services of one sort or another can serve as an alternative to foster home placement, the objective in each case being a more stable environment for the child. (Child Welfare League, 1959). De Fries, Jenkins, and Williams assert that

> Despite new and enlightened attitudes in child care, problems remain that have defied repeated attempts at resolution, especially in regard to a particular means, namely, foster family care. We need to look more critically than ever at any sanguine proclamations about this method of foster care, and to reexamine its rationale in light of existing situations. Under ideal conditions, foster family care can be an effective substitute for parental care, but when actual conditions depart as radically from the ideal as they do in so many situations, particularly those involving severely disturbed children, antiquated ideals must be discarded and workable substitutes found. (1965, p. 73)

It is critical in any policy based on this argument that the list of crises and stresses suggesting intervention be kept very flexible; of more import than the particular kind of crisis or stress are certain case by case guidelines: (1) the situation must deprive the child of adequate care and supervision (2) it must be temporary or only affect part of the child/caregiver relationship.

Unlike the first two situations involving supervision, these last ones might equally as well occur in average or high SES families as in low SES families. This raises the question of what part income levels ought to play in determining need or eligibility for such intervention or day care programs. As its answer must be predominantly political or economic rather than empirical, we shall not discuss it further.

We have found no evidence or arguments that services or intervention are not called for in these crisis/stress situations. In their absence, the alternatives appear simple and unattractive: a high probability of harm to the child if nothing is done, or the necessity of moving the child to a foster home. Clearly this argument is simple and compelling. It holds only if the guidelines for intervention are very sensitive to the child's environment; if they are not, the probability of unnecessary intervention becomes high, and this in some cases might be enough to cause, rather than prevent, a family stress. To imply to a family that it is incompetent to look after its own children is an act that must not be committed easily. The availability of various child welfare services, on a voluntary basis, can help forestall the necessity of such a step.

We have thus identified three areas of need: that of supervision for children who are in effect unsupervised during much of the day, that of a stable environment for a child whose family is unable to care for him due to crisis or stress, and that of availability of services to families to help prevent crises.

Could a system of Federally licensed or supported day care centers help in these situations? In the case of children who regularly have insufficient or no supervision, it clearly could. Care must be taken, as has been indicated, not to automatically exclude all sibling or group care as insufficient. For instance, in the summer when school is out, it might be quite reasonable to consider care by an adolescent sibling preferable to that obtained at a center. At other times, or if there is no competent sibling, a center makes more sense.

For children neglected due to family crises or stresses, it is not so clear that centers would be helpful. Centers tend to operate during the working day, and occasionally into the evening. Family crises, however, are if anything more frequent in evening and night hours, and the center would simply not be there when needed at such times. There are questions, too, as to the wisdom of placing children from stress or crisis situations into a highly fluid and complex environment with many other such children, as would be the case were the demand for centers to consist largely of such cases.

There are alternatives to day care centers in each of the three situations. These include family day care homes, Parent and Child centers, and homemaker services. Family day care homes (which come under the Federal standards in appendices IIa and IIb) are in effect smaller and closer day care centers operated in the sponsors' homes. Parent and Child Centers (of which there are 33) can provide a multiplicity of services, including actual care or arrangements for care. Homemaker services send a person, called a "homemaker", into the home for anywhere from a few to 24 hours a day to perform a variety of tasks and to advise on other appropriate helping agencies where necessary. The homemaker's services can involve housekeeping, nutrition, health, child care, and lay or paraprofessional therapy.

The appropriateness of Parent and Child Centers for family support functions depends on the resemblance of the particular center to one or another of the various service forms. In general, they can serve as actual day care centers or as referral services to day care homes or homemaker services.

Family day care homes are particularly appropriate for the care of very young children, as they might not diffuse the child's sense of one caregiver as much as a large center. A day care home might also provide some of the flexibility called for by family stress situations -- it could, for instance, occasionally provide sleepover accomodations.

Homemaker services, although useful to compensate for insufficient supervision, are particularly appropriate in crisis situations. Homemakers can see that the child is well cared for while at the same time possibly helping to ease the situation itself. Also, the child can remain in his own home, which might be important to child or parents in helping contain the effects of the crisis.

The proper response to a stress situation is more delicate. Where the stress itself might be alleviated by appropriate family or social intervention, care must be taken that any child-directed intervention not be counterproductive in the larger context. It makes more sense to enable a family to eat adequately, for instance, than to take the child to a day care center and feed him.

Conclusions. The considerations above lead us to conclude that for children under three years of age, the more complex and probably more distant day care center setting is inappropriate. Depending on the situation involved, day care homes or homemaker services are preferred.

Insufficiently or non-supervised children from age four to nine can benefit from either day care centers or homes. It has been indicated that it is somewhat unsound for large numbers of children coming out of crisis situations to be thrown together in an essentially unstable environment where new children are coming and going all the time. This fact, coupled with the often erratic hours at which such children require care, suggests that day care homes or homemaker services are more appropriate for them.

It should also be remembered that the potential deleterious effects of family crises or stresses on children, and the consequent needs for care or intervention, probably decrease with age. Extreme caution is indicated in (1) deciding that a child's supervision is incompetent and (2) selecting appropriate intervention or care strategies in a crisis situation. Finally, crises often occur at odd hours; a responsive service must be available at such times. In more graphic form:

| | | Situation | |
|---|---|---|---|
| | | in effect unsupervised | stress or crisis |
| child's age | 0-3 | homes or homemaker service | homes or homemaker service |
| | 4-9 | centers or homes | homes or homemaker service |

It would be very helpful to know the numbers of children in the various situations discussed above. A 1965 figure of 18,000 unsupervised under six children of working mothers has been cited. For only 7,000 of those, however, was the employment of the mother full-time. The same study (Spindler and Low, 1969) found 25,000 children under six years of age supervised by a relative under 16 all day, while 56,000 were under such care part of the day. They report 212,000 children were cared for in group care centers. The potential users of a subsidized day care system created in response to this argument, with the exception of children from crisis or stress situations, would be found among these groups. The exact number would be dependent on specific situations; the maximum (subject to the following caveats) is about 300,000 children under six. This is an overestimate in that it includes many children whose supervision was probably quite adequate. It is an underestimate in that it deals only with working mothers' self-reports of child care arrangements and with 1965 conditions and population characteristics.

Stress and crisis situations are much harder to identify and tabulate accurately. One useful reference might be foster home placements for stress and crisis reasons. Shirley Jenkins reports data that indicate that during four months in 1963 in New York City there were about 775 children referred to foster care for such reasons (derived from Jenkins, 1966, p. 18 and 64). Such estimates are not a good method to determine demand. The entire question needs serious and careful research.

## Family Replacement

This argument for day care services differs little from that of supporting the family in terms of the actual programs it implies for the child. Its basic premises, however, differ markedly from those for support. There are two main bodies of argument, which are complementary.

Female equity. In the United States, and indeed in most cultures, it has been the traditional duty of the child's parents to raise that child to the point where he or she assumes a role in society. It has also been the case that the father's primary family duty is to work and provide the means for the mother to raise the child or children and run the household. This norm has led to a situation where, until recently, a woman, whether or not she was qualified, was considered not appropriate for most occupations, particularly skilled, professional, and managerial ones.

The argument is that this social ethic came to exist only to ensure that the child was cared for by the mother, and that it falsely assumes that any other child care systems are inadequate. Consequently, it is argued that there is no reason for differentiation between men and women in terms of basic qualifcations for employment and responsibility. If a woman is to spend her time caring for child and home, it should be by choice, not as a duty. This argument has met with widespread approval, and the right of women to equality of opportunity has been increasingly supported by laws. A corollary of the argument is that some system must be provided so that children are cared for adequately if the caregiver works; the appropriate system will depend largely on the age of the child and on any special problems he or she might have.

Nuclear family breakdown. This argument is closely related to the preceding one. It is contended that, for whatever reason, more and more children are not part of a nuclear (mother, father, children) family, that social and other services are predominantly intended for such families and assume their existence, and that consequently more and more children are being deprived of services intended for them or their families. The problem of a single working mother faced with a pediatric clinic open 9 to 5 illustrates the argument.

Various statistics can be cited in support of the argument. In 1960, there were 28 divorced men and 42 divorced women for every thousand married and living with their spouses; the corresponding figures for 1970 were 35 for men and 60 for women. Elimination of farm families from these figures increases the trend. There were about 1.2 million children aged 9 or under living with such an unmarried divorced parent in 1970 (U.S. Bureau of the Census, 1971a).

Another basis is the rise in the so-called illegitimacy rate, from 21.8 such births per thousand single women in 1960 to 24.1 in 1968 (U.S. Bureau of the Census, 1971b).

The policy implications of these arguments are most significant for families of average and slightly below average SES. In low SES situations, the question is rarely whether the mother or father wishes to care for the child, but rather who will do so since often both must work (a similar argument applies to single-parent families). Care or intervention often is called for, as was found in the family support discussion, to protect the child. In high SES situations, on the other hand, it has usually been possible for excellent private care to be arranged whenever desired or needed.

If the family replacement argument is accepted, it implies a policy of day care centers or homes available to any parents who might desire their services. There are questions of sliding fees and tax exemptions which would remain to be resolved. It should be clear that such a policy would also include a response to the problem of unsupervised or stress-neglected children.

The bulk of these arguments, therefore, are independent of child protection issues. One can speculate on the potential effects on children of this social change from predominantly maternal home to some other form of care on children, but little is actually known. Until now, the choice of child care techniques and philosophy, except in certain need situations, has been a private one made by parents or groups of parents. A federally supported system would bring with it standards for care, and to some unavoidable and probably minimal extent, uniform child rearing practices.

Policy, given the family replacement argument, must be to see that children are cared for wherever the trends in family roles seem to be leading and whatever the reason which precludes family care. Should care be called for, it must fit the needs of the child in much the same way as it has been suggested that day care centers and homes fill the needs of unsupervised children.

There is no clear estimate of the demand for such care, beyond that estimated in the previous section. Research asking women if such services would be used has proven to be notoriously inaccurate when followed through into utilization studies (See Tropp, 1972).

One final point of clarification is necessary here. Some argue that reproduction is a biological function requiring no specific social organization (such as families) and that child rearing is the job of society as a whole through its selected method of government. The discussion above does not include this argument. It instead maintains the basic premise that parents have the right and responsibility to oversee the rearing of their children, but argues that there is no reason that the option to delegate much of this responsibility to a public organization should not be available to all parents.

## Fiscal

There is an argument that providing day care could release many present welfare/AFDC recipients for work, reducing welfare costs by more than the day care necessary would cost. This argument has come to involve rather more emotional issues surrounding welfare reform and work incentive proposals. These issues will not be engaged here but they cannot, ultimately, be ignored.

Aid to Families with Dependent Children (AFDC) had its state-level relatives are payments to a one-parent (or in some cases unemployed parent) family which are supposed in general terms to ensure parental care for children by precluding the necessity of the caregiver's working. In fiscal year 1971, such payments totalled over 5.7 billion dollars, reaching two and a half million families (Office of Management and Budget, 1972, appendix p. 452; includes state and local shares). It is argued that, in terms of cost to the government and ultimately the taxpayer, it would be beneficial to provide a system of adequate day care so that mothers could work and to discontinue payments to families to provide such care. The consequent deficit in the family budget would be made up by the earnings of the former caregiver. It is also argued that such a system would more accurately reflect traditional American respect for the "work ethic".

Several assumptions underlie this argument:

1. Mothers of young children will be available for employment once child care is accessible for their children.

2. There will be jobs for these women and the work will be relatively steady.

3. The system of day care centers will be cheaper than the costs of assistance payments.

4. Provision of child care will be an incentive for mothers to work.

5. It might benefit the child if his or her principal care-giver has a productive role outside the home.

Availability. There is reason to believe that a substantial proportion of mothers would be unavailable for work even if they were relieved of child care responsibilities. The Institute for Interdisciplinary Studies' Day Care Study Group reports reasons such as illness, disability, or the need to provide care for a spouse, parent, relative, or child with special problems requiring individual care. Presumably many of these women would have to be supported through assistance programs of some sort (Day Care Study Group, 1972), reducing the potential savings involved.

Jobs. There are various reasons to question the assumption that jobs are now available for AFDC mothers. First, there is now relatively high unemployment. Second, unemployment is particularly high among relatively unskilled women, the group that would be augmented most by this proposal (New York Times, December 5, 1970). Finally, the results of job training programs have shown difficulty in placing women in steady jobs after such training (U.S. Department of Labor, 1971). However, these figures, based on 1972 conditions, do not speak to a situation with a greatly changed labor market and extensive job training, as would presumably be found under a program based on this argument.

Cost. This is the critical assumption in the argument and bears more careful consideration than can be given here. In the analysis, the effects on the economy of rerouting federal funds through day care operators rather than through families are ignored. Unless such effects are major, they cannot affect the basic conclusion that the assumption is not in fact valid (for some discussion of these issues, see Ogilvie, 1972).

Approximately 2.5 million families, including 6.9 million children, received AFDC payments totaling 5.7 billion dollars in fiscal year, 1971. This implies that the per family cost of AFDC welfare is about $2,500. For the assumption that day care would be a less expensive method to care for these children to be valid, the cost of providing day care for the average AFDC family's children must not exceed $2,500.

In chapter 9, several attempts to derive per child costs for day care were described. If the analysis developed by Abt Associates (Rowe, 1971, appendix A), which includes figures for donated services which they expect would not be donated under a major day care system, is applied to the 1972 Proposed Federal Day Care Requirements, a cost of about $2,170 per child per year is obtained for minimum care which meets licensing requirements. This is an average figure; the younger the child, the more expensive the care.

If these two calculations are brought together, it is clear that only in the case of families with one child under the age of six is a system of day care centers a cheaper way to care for children than AFDC. Unless children with older siblings are to be denied access to care, this means that each family with two or more children under six will result in much higher day care costs than AFDC costs. We have no statistics on the incidence of such families among present AFDC recipients. However, other figures indicate that there are about 1.2 children under six per AFDC family. About 37% of the 2.5 million families have children six to twelve, resulting in a net average of 2.8 children per AFDC family (these figures exclude "nonrecipient children"). If the entire expenditure due to AFDC welfare, Federal, state and local, could be transferred to an under six day care system, the net cost would not change; however, any additional expenditure such as payments to incapacitated mothers or day care for seven year olds would raise cost well above the present level (derived from National Center for Social Statistics, 1971, tables 33-35).

This analysis is of course rough and excessively simple. It is conservative in that it does not involve the cost of day care for non-AFDC families, which might be substantial and make the argument of cost benefit even less valid. On the other hand, it does not address the question of the level of service children actually receive under the present AFDC. The cost of reforming welfare so as to enable adequate care to be provided might also be considerable.

A change in the basic standards for adequate day care would also affect the analysis. However, few fully costed estimated minimum care standards fall below $2,000 per child (Rowe, 1971). This is not a trivial point. In the earlier discussion of day care quality, it was suggested that voluntary day care would probably be of adequate quality. Some of the day care proposals based on the fiscal argument are in effect mandatory, which implies that parents would not be able to exercise the option of not placing their children in day care. This is a situation where explicit standards would be necessary, and accounts for the reliance in this section on cost figures so derived.

It has also been suggested that a substantial part of the costs could be recovered through sliding fee structures. However, we have found little evidence that substantial revenue could be so obtained.

Incentive. Until quite recently, opinion and 'market' research had indicated that ten to 20 per cent of mothers of preschool children saw the lack of day care as a barrier to their employment. More recently, evaluations of several projects and some other studies have indicated that such solicited opinions are unlikely to predict actual behavior when day care services are in fact offered. The data indicate that provision of day care has little incentive value for mothers to work (see, for instance, Ogilvie, 1972; Tropp, 1972).

Child benefit. This assumption rests on a belief that the child of a working parent will be better off than one whose parent does not work, financial factors being equal. There is little evidence to support or refute this; as had been the case with most developmental issues, it cannot sway policy one way or another.

Conclusion. This analysis of the assumptions supporting the fiscal arguments for day care has shown them to be largely unfounded. Most importantly, there is little support for the assumption that day care would save money over welfare. Consequently, these arguments cannot serve as justification for providing a Federal system of day care, either for welfare recipients or for the general population.

This conclusion is based on conditions in 1972. It is not unreasonable to expect major changes in these conditions over several years, and it is entirely possible that under these changed conditions the conclusions might be quite different. We shall not speculate here about this future, but any policy process must do so.

There is one final issue related to this whole argument: job creation. Clearly a system of day care centers would provide jobs, for which women freed from child care responsibilities could be trained. This does not change the basic conclusion as far as this section is concerned; however, it might be a point in support of the family replacement argument. The detailed effects of job creation fall outside our qualifications, and we merely note the issue at this point.

## Screening/Treatment

In the discussion of health systems in Chapter 6 certain basic inconsistencies between present systems and the needs of children were explored. It can be argued that one correction for this might be the institution of virtually universal screening of children for health or educational problems and the provision of corrective services as needed through a system of day care centers. Once again the concept of the critical nature of the early years of childhood is involved; at present, the first opportunity for widespread screening of children occurs at school entry. Furthermore, such a system would preclude the necessity of finding all children in their homes, a difficult process.

Hypothetically, a wide range of diagnostic and remedial services could be provided. The center could provide a channel through which various outreach services could act on the child's environment, both at the center and at home.

The validity of this argument as a basis for day care policy is contingent on several lesser arguments:

1. Usage of centers will be essentially universal.

2. Useful screening techniques for very young children exist and are useful.

3. Day Care centers represent an efficient form of screening medium.

Among these (2) is the only one which might be supported. Although there are dangers in the present screening techniques (particularly of unnecessarily labeling children with their 'problems'), some areas of childhood trouble could be avoided if caught before the age of six. Malnutrition, pica, and some perceptual handicaps are three examples.

There is no evidence, on the other hand, to suggest that attendance at day care centers would even approach the total child population, short of universally mandatory programs. Even where it might be financially beneficial to a family to use day care services, they often do not; these trends are borne out by experiences in income maintenance and various employer subsidized efforts (Ogilvie, 1972; Tropp, 1972).

Even if screening techniques were excellent and day care use universal, the potential level of problems would hardly justify an expenditure of $2,000 per child. In most cases, one or two days a year of the child's time would be ample for all screening, educational and health, at an expense of about $200 per year per child (see Chapter 6). Furthermore, the medical and paramedical personnel to permanently staff a universal day care system simply do not exist. Some form of rotation would thus in any event be necessary.

## Recommendations

There is one broad question with which we have not dealt coherently: that of present demand for and supply of day care services. It is not a trivial question, either in significance or answerability, and we did make efforts to respond to it. In the process of doing so, we discovered that a comprehensive and authoritative study of just this question was in progress (Tropp, 1972), and we commend it to those in need of such figures.

Of the five arguments in support for a Federal day care program, in two cases--fiscal and screening and treatment--the arguments presented do not support such a policy, as the assumptions on which they are based are not sufficiently valid. In two other cases--family replacement and child development--the arguments are either inappropriate or too indeterminate for judgment, and we have concentrated on presenting and analyzing those arguments. In particular, developmental questions neither supported nor countered the idea of day care. The final argument, family support, has resulted in the conclusion that it supports the establishment of a Federal policy to provide the needed services.

We make four recommendations for Federal day care policy, in roughly descending order of importance:

Support. That a system of day care facilities, including centers, homes, places in private centers, homemaker services, and other facilities as outlined in the Support section be organized to deal with the needs of children from unsupervised, inadequately supervised, crisis, and stress situations as needed. This responds to the conclusion that children from insufficiently supervised or stress situations should be cared for. The appropriate mix of facilities will depend on the nature of needs and on what is already available in a given area. The broad question of family support policy is dealt with in Chapter 13. The question of exactly what constitutes incompetent supervision must be considered carefully in the design and operation of this system.

Screening. That some appropriate organization such as outreach services from a network of appropriate health facilities as outlined in the next chapter be devised, tested, and instituted to provide screening of young children for potential health and educational problems, and that a full complement of services be made available to deal with those problems as necessary. Where research is necessary to accomplish this, it should be supported. It is beyond our competence to suggest specific mechanisms here beyond those which will be discussed in Chapter 13. We include the recommendation to underline the fact that day care is not an appropriate mechanism. Again, more general discussions are elsewhere in this report; educational screening has been discussed in the context of preschools, and health screening is discussed in the next chapter. Excessive labeling of children must be avoided.

Experimental centers. That a very limited number of densely populated areas be selected for the experimental establishment of a multi-purpose day care center offering a broad spectrum of services, with both the centers and detailed analysis of their operation to be supported by the Federal government. In addition to testing a form that day care might well take, we feel it is necessary to get a good idea of just how various aspects of day care would operate, and to modify them on the basis of that experience. There are existing experiments to test various child development hypotheses; this proposal is directed more at obtaining information on the optimal way to operate a center so as to most efficiently and effectively cope with the usage rates, types of problems, program successes, and other basic factors affecting management of even a rough approximation to an average day care center. At the same time, experiments must be conducted to see if it is possible to stimulate private day care purveyors to continue operation so as to provide stable facilities into which the government can place limited numbers of children when needed, and to analyze the operation of such programs for further insights. In much the same way income maintenance and health screening experimentation have begun to illustrate the effects and requirements of a general program, this day care experimentation will hopefully provide an idea of what generally available day care would be like and on the form centers, homes, or services must take in order to deal effectively with the problems they respond to.

Housing. That efforts be made to produce and execute housing designs that will promote informal or otherwise shared child care arrangements. This takes into account several considerations about day care in an attempt to find viable methods of providing it in the future if it is needed. Care should be close to the home; this is both intuitively and evidentially supported. Even if day care does come to replace some family functions, there is no reason to unnecessarily remove control over it from the parents. It makes more sense to plan day care facilities with a residential base than with an institutional one, as is now often the case. In the broader sense, the recommendation is directed at the trend toward deemphasis of informal barter-type day care arrangements, which has been at least partly due to the socially isolating effects of urban expansion and large scale housing. The goal is a modern urban equivalent of the unfenced middle-of-the-block backyard.

There are several more general recommendations which we should state. First, all day care, whether in homes or centers, should be of such a quality as to offer very little risk of harming the child. This might be met by strict adherence to a carefully derived set of standards or by parent involvement. Similarly, intervention programs, whatever their motivation, should be very sensitive to the possibility that they might cause stresses as well as ease them. No set of rules will accomplish this; what is required is a real sense of professional or paraprofessional ethics.

Second, we recognize that advances in the state of knowledge about early childhood might substantially change our conclusions, particularly in the area of child development. Analysis has shown the necessity of further knowledge about children; we urge that its pursuit be encouraged. Most particularly, we must note the present inability to define levels of care which are inadequate in developmental terms; if only for reference, this is a basic piece of information which must be pursued.

Finally, there might exist situations in which a day care center is in any terms, including financial, the best solution to a group of problems. In such situations, facilities should be provided.

# Chapter 13: Recommended Emphases in Programs for Children

## Summary

In this chapter, recommendations are made for three areas of intervention: education, working with the family, and health care.

There are two educational recommendations: that there be an attempt to increase structure and management in early education, and that an attempt be initiated to diversify early education.

## Recommendation:
## Increased Structure and Management in Traditional Curriculum Areas

It is proposed that a strategy of increased structure and management in the primary school classroom be used to increase the attainment of basic skills of reading and arithmetic. Increased classroom structure and management includes: (1) a strong instructional emphasis with clearly stated and measurable goals, which are carefully sequenced; (2) ongoing assessment capability in the classroom; (3) individualized help after assessment; and (4) extensive planning by and careful supervision of the instructional staff.

The federal government could move to encourage increased structure and management by providing incentives primarily in the form of (compensatory education) resources tied to conditions designed to encourage adoption of the recommended strategy; by providing technical assistance and information; and by creating demonstration projects.

### Recommendations

I. Encourage strong instructional emphasis on primary school programs:

--Making all or some compensatory education funds contingent on publication of standardized score results on tests of basic skill competence. We believe that this requirement together with active parent participation would cause increased pressure on local schools to emphasize basic skill-achievement goals.

--Setting up, possibly through state grants, model schools which exemplify strong instructional emphasis.

--Dissemination of information about successful implementation and results of more structured projects, not only to school administrators and teachers but also to parent advisory groups, organized interest groups in education and local school boards.

--Creating model teacher education programs such as the Teacher Corps, together with active liaison requirements with local school systems.

II. Encourage increased assessment capability in the classroom by:

--Writing strict guidelines for Title I requiring implementation of diagnostic assessment through hiring of diagnostic classroom personnel.

--Providing in-service training for professional teachers in diagnostic skills in primary-level reading and other basic skill achievement.

--Funding training programs for diagnostic personnel in educational personnel funding.

--Providing incentives for the purchase of diagnostic and feedback materials.

III. Increase the amount of individualized instruction by:

--Supporting the training of paraprofessionals and teacher aides for instructional purposes.

--Targeting compensatory aid through guidelines toward hiring additional instructional personnel in the classroom and toward purchasing of instructional machines.

--Funding innovative projects embodying differentiated staffing.

--Funding model schools with exemplify the strategy of increased structure and providing for liaison with local schools.

IV. Improve management, planning and supervision skills among teachers and administrators.

## Recommendation: Diversify Education

To diversify education essentially means to broaden the range of activities emphasized in the classroom which are considered a legitimate part of the child's education and for which the child is rewarded and receives prestige. Those skills that are now considered basic should be taught in the most effective manner possible. But the remainder of the day should be spent in activities which allow each child to use and develop other skills. It appears that there are other human skills that -- in terms of vocational relevance, in terms of the structure of human abilities, in terms of educability -- fully deserve to be a part of the basic early curriculum.

This recommendation can now only be given in a general way, as a statement of the need for the development of a diversified emphasis. The types of activities and the specific curricula which would be included in a diversified education program would have to be established by a development program. The established distinction between verbal and spatial abilities could well be used as a starting point, given that the distinction has been well documented and that a reasoned argument now exists that schools should acknowledge it. We are here recommending planning followed by program research and development in order to design a more diversified education for children.

## Recommendation: Work With the Family Rather Than Around It

This recommendation proposes a general goal of services which should apply to planning and implementation of all public programs directed at children. The recommendation holds that public policy in this area should make families the focus of intervention efforts, should use parents as primary agents of change, and should involve parents in policy and administrative decision-making.

### I. Social service referral

Social service referral, usually done by private family agencies or public welfare agencies, helps families to obtain financial aid and social resources. The referral agent, not necessarily a professional, plugs the family into community resources like schools, preschools, day care, housing agencies, training programs, employment opportunities, health and family planning services, homemaker services, surplus food or food stamp programs and income supports (Chapter 10).

The intended effect is to improve the functioning of the family in diverse areas such as family unity (marital, parent-child, among children, solidarity), care and training of children, social activities, fiscal practices, household management, health conditions and relationships to community.

Recommendations

--Require that social service programs emphasize referral services.

--Do not fund referral programs in areas which lack available social services, for example, in isolated rural areas.

--Modify professional social work credential requirements providing alternative competence-based criteria.

--Fund training programs in social service referral.

### II. Parent training for the cognitive stimulation of their children

Training parents for the cognitive stimulation of their children involves teaching mothers certain behaviors which are believed to enhance the cognitive development of children from age six months on. The intended effect is to increase the measured intelligence of the child, ensure his readiness for public schools and enhance his achievement once in school.

Recommendations:

--Fund parent cognitive stimulation programs for children with perceptual handicaps or other serious learning problems as early as possible, beginning at age six months.

--For other children without severe handicap or severe retardation, there seems to be no critical age. However, if screening is used at age four, parents of children who score as mildly retarded should be encouraged and offered to take advantage of parent cognitive stimulation programs. If screening is not used then there is no particularly desirable eligibility criterion in the evidence.

--Fund voluntary training programs for parents in cognitive stimulation of their children. This would be useful not only for their own children, but also for developmental day care, preschools, or elementary schools where parents might be employed.

III. Employ parents as teachers of small groups in day care, preschools and elementary schools.

Parents are first trained in cognitive stimulation techniques. They are then taught how to manage small groups of children in structured cognitive stimulation teaching.

Four intended effects might emanate from such a strategy: (1) increased, total family income for the family of the paraprofessional parent; (2) enhanced self-concept of the paraprofessional parent; (3) greater parental interest by the paraprofessional in her own child's school achievement.

Recommendations:

--Fund training of parents in cognitive stimulation of children and in small group instruction if developmental day care or preschool are funded.

--Fund training of parents in cognitive stimulation of children and in small group instruction for elementary school teaching.

--Require employment of parents in programs involved in teaching in day care, preschools and Follow Through or Title I, ESEA and elementary schools.

--Through dissemination of information and technical assistance services, encourage public primary schools to employ paraprofessional parents in teaching small groups.

--De-emphasize professional credential requirements beyond the successful completion of an appropriate training program for such paraprofessional teachers.

IV. Involve parents in decision making in child development projects.

In federally-funded child development programs, many important decisions are left to be made at the local level. Examples are: precise eligibility requirements; acceptance of families and children into the project; hiring and firing of project personnel; details of implementing project strategy; finances; allocation of funds; planning for the future; and modification of project components and goal emphasis. Parents should be involved formally and informally in the making of these policy and administrative decisions. In some cases they can be formal members of governing boards. In some cases they can act as advisors to the project director and his board. In most cases they should act as paid and volunteer observers and participants in day-to-day affairs.

Recommendations:

--Parents of target-group children should be heavily involved in the initial planning of projects in child development.

--Parents of target-group children should be continuously involved in the administration of projects as advisory board members and as voting members of governing boards.

--Child development programs should require the employment of parents in various capacities, notably as aides and paraprofessionals. This will ensure parent presence at the point where children come in contact with other project staff.

--Various types of technical and legal assistance should be provided to the parent component of governing and advisory boards. Training programs in administrative and budgeting skills should be included in the funding of local projects. Low-income parents should be paid for the time spent in training and in working for the project as advisory and governing board members.

--These recommendations refer specifically to parents of target-group children. In many cases, it will also be desirable to have input from community members other than parents. A clear distinction, however, should be maintained between community and parent members. This recommendation speaks to the latter (the parent) component.

V. Family therapy, counseling and therapeutic social casework

These strategies usually involve a professional therapist treating a client or clients defined by their family membership. The professional may be a psychiatrist, psychologist, guidance counselor or caseworker. The emphasis of therapy is probing underlying emotional malfunctioning of the family which has led to inadequate or disturbed child functioning. Excluded from this strategy are behavior therapies and group therapy with non-family members.

Recommendations:

--Do not fund major programs relying on therapy, counseling or therapy-oriented casework in child welfare or social service rehabilitation for families receiving public assistance under AFDC.

--Do not fund training of professionals for therapeutic social casework practice.

--De-emphasize professional credential requirements for those therapy and counseling programs which have not been eliminated. Substitute training requirements and certification of competence based on behavioral assessment.

## VI. Parent Education

Parent education for child development is designed to impart knowledge to parents so as to improve the physical, emotional, social and economic life of the family, emphasizing outcomes for children. It has traditionally been pursued through lecture and discussion; by pamphlets and books; by counseling; and, now recently, by television.

Recommendations:

--De-emphasize operating parent education projects designed to improve parent-child rearing and home management behavior.

--Instead, fund small experimental projects designed to overcome the serious obstacles to effectiveness both of programs and of evaluations.

--De-emphasize professional credential requirements for parent educators that remain funded by federal sources.

## Health Care Recommendations

Children's health problems are not neatly separable from problems in the organization of services designed to solve them. Consequently, health recommendations cannot be made through a comparatively simple comparison of existing problems with available programs. Generally speaking, in the case of health,the right programs exist. The problems arise from utilization, availability, and accessibility. Health care recommendations must reflect a consideration of the health caretaking system.

From a general introductory discussion of the relationship of health to child development and the problems associated with policy decisions, we move to a set of recommendations for child health programs related to the general child development strategies which are being developed in this report.

Recommendations:

I. Nutritional programs should be redesigned, expanded and given greater priority as a preventive health strategy for children.

II. Maternal and infant care projects and family planning programs should be expanded to cover more of the high-risk populations; these programs should remain (as they are at present) separate, categorical programs for the immediate future.

III. Other health efforts for children should be incorporated into one of two more comprehensive settings:

Recommendations:

--Comprehensive, family-oriented health delivery systems such as Family Health Centers.

--Multi-service programs for children, such as Head Start, Schools or Parent-Child Centers.

IV. Broad emphasis in a child health strategy should be diversification of pediatric manpower (along with general expansion of allied and community health personnel); improvement in financial support for child health services; and improvement in general environmental conditions for children.

# Chapter 13: Recommended Emphases in Programs for Children

## Elementary Education Recommendations

In this section we address elementary education in terms of two broad principles, which apply to various components and practices at schools. The first, increase classroom structure and management, addresses the question optimizing children's acquisition of basic reading and arithmetic skills. The second, diversify education, addresses the question of insufficiently heterogeneous goals in early schooling.

### I. Increase Classroom Structure and Management

One of the most important purposes of primary schooling is the teaching of "academic" skills, especially the basic skills of reading and arithmetic. In this first elementary education recommendation, it is proposed that a strategy of increased structure and management in the primary school classroom be used to increase the attainment of basic skills. Other goals of primary schooling of equal importance may of course require different strategies.[1] Since the federal government is legitimately concerned about the lack of achievement of primary school children, especially of low-income or "disadvantaged" children, it should move to foster this strategy.

An operational definition of what is meant by increased classroom structure and management includes: (1) a strong instructional emphasis with clearly stated and measurable goals which are carefully sequenced; (2) ongoing assessment capability in the classroom; (3) individualized help after diagnosis; and (4) extensive planning by and careful supervision of the instructional staff.

There is substantial evidence from a large number of preschool and primary school classroom intervention studies that structured programs[2] produce higher average achievement scores in academic or basic skills among primary school children. In this recommendation, we shall simply cite the studies, but we shall also provide quotations from major reviews of the literature. Many of these studies are reviewed in Chapter 7 and Chapter 8. A brief analysis of the nature of early primary schooling achievement tasks is presented to explain why structured programs seem to get better results on such achievement tests.

---

[1] For a discussion of these goals and recommended strategies, see the other recommendations in this elementary education section. Strategies of parent training, employment in elementary schools and parent involvement in child development and elementary education programs are discussed in the "Work with the Family" recommendations.

[2] Within the definition of structure fall programs using a variety of methods with differing rationales. For example, Bissell (1970) distinguishes between structured-cognitive programs (such as Karnes et al., 1969a, 1969b; Weikart, 1971; I. Gordon, 1969), and structured-informational programs

Three major objections commonly raised against the evidence on which the recommendation is based will then be discussed: (1) there are methodological problems in evidence supporting benefits of increased structure; (2) increasing classroom structure is not feasible; and (3) increasing structure to raise achievement is not desirable because a) achievement is not or should not be a major goal of primary education, or b) because increased structure for skill achievement has the harmful side effect of preventing realization of goals concerned with creativity, "sound conceptual thinking", and independence. While the issue is far from settled, the most serious problems raised by critics are either avoidable or are not persuasive when weighed against the benefits which accrue to the child and to society from a strong foundation in basic academic skills.

The most frequently advanced alternative to increased structure is the traditional policy of simply providing more resources. Several compensatory strategies are briefly presented: smaller class size; new equipment and physical plant improvement; higher level of teacher qualification; and provision of preschool for all children. Rather than review all the evidence of possible ways to spend compensatory education money (which includes thousands of studies, few of which are methodologically sound), we rely primarily on two of the most careful, thoughtful and complete reviews of the literature. Both Averch et al., (1971a, 1971b) and Jencks (1972, in press) agree that the present evidence is overwhelmingly against obtaining increases in achievement by merely increasing school resources.

We then list programs currently funded by the federal government which could provide the leverage necessary to encourage local schools (especially those in Title I areas) to move in the recommended direction. Following the program list are specific recommendations. These steps, if taken by the federal government in implementing the mandate to improve the education of low-income children, would be likely to result in greater emphasis on classroom structure and management.

---

(continued) (Bereiter and Engelmann, 1966; Bushell, 1970). For the purposes of this recommendation these two categories can both be considered structured. Two other Bissell categories, "structured enrichment" and "structured environment", are not structured according to the definition used above.

Most recent interventions which increase structure have been tried on low-income children, although some studies systematically or randomly include middle-income and middle class children. In almost all cases, average effects favor structure. This does not mean that some lower-income children as well as some middle class children do not do better with other strategies. We speak here, given the evidence, of average effects.

Evidence Supporting Increased Structure and Management

Preschool Studies. Evidence from preschool interventions suggests that projects having a strong instructional emphasis and clearly stated and carefully sequenced behavioral goals in the teaching or reading and other basic primary grade skills produce better results than projects without strong instructional emphasis, especially for lower-income children.

Studies: Bereiter, 1970; Bereiter and Engelmann, 1968; DiLorenzo et al., 1969; Engelmann, 1970; Erickson et al., 1969; Gray and Klaus, 1970; Karnes et al., 1969a, 1969b; Risley, 1972; Weikart, 1967, 1969; Weikart et al., 1970. For complete references together with discussion, see Chapter 8.

Reviews: Bissell (1970) reviewed a large number of experimental preschool projects. By covarying for beginning score levels, "regression to the mean" was controlled for. She found that preschool programs with general objectives of fostering cognitive growth, with specific emphasis on language development, and with teacher directed strategies that provide highly structured experiences for disadvantaged children are more effective in producing cognitive gains than programs lacking these characteristics.

Bereiter (1972), the creator of a well-known preschool model, reviewed the best preschool projects and found that the key ingredient to all successful programs is instructional emphasis.

> The Bereiter-Engelmann program stands as the most extreme and clear-cut version of a highly structured, detailed method of instruction. Accordingly, the kinds of general inferences that can be drawn from evaluations of the Bereiter-Engelmann program are likely to be inferences about the value of deliberate instruction at the preschool level.
>
> (1) The Bereiter-Engelmann program has clearly had more impact on IQ and achievement than the traditional, child-centered approach, but not necessarily more impact than other programs with a strong instructional emphasis.
>
> (2) The "traditional" nursery-school and kindergarten program is not a serious contender as an educational program.
>
> (3) The long-term effects of preschool instruction are about as good as can be expected. (pp. 5-12)

Bissell (1971) summarized data collected by Stanford Research Institute on the first year of Head Start Planned Variations. Most well-implemented curricula showed effects favoring the particular model over regular classes.

> At the same time, a specificity of effects was manifested such that programs with well-formulated objectives in particular areas did produce effects consistent with their orientation. This specificity was reflected, for example, by all models on the parental questionnaire, by Preacademic and Cognitive Discovery models on achievement and cognitive functioning, and by the Preacademic and Discovery programs on measures of response style. (p. 30)

Stearns (1971) produced the most extensive, careful, current review of preschool interventions. "The more a program is well-formulated, well-organized and focused on intellectual attainment and language skills, the greater are the changes in children's intelligence test performance."

Our detailed review (Part II, Chapter 8) of preschool intervention projects concluded that the amount of improvement varies with the explicitness of the objectives in terms of expected child performance, the soundness of the instructional methodologies, the amount of time spent attaining the objectives, and the similarity between instruction and performance required by the test.

Elementary School Studies. Evidence from elementary school interventions suggests that projects having a strong instructional emphasis, and clearly stated and carefully sequenced behavioral goals in the teaching of reading and other basic primary grade skills produce better results than projects without strong instructional emphasis.

Studies: For a complete list together with discussion, see Chapter 7.

Reviews: The Center for Educational Policy Research (1971) surveyed 712 Title I evaluations of "successful" projects, nominated by state Title I coordinators, between F.Y. 1965-1970. Site visits were made for four structured projects:

> We found that high structured, prescriptive and teacher directed programs were extremely atypical of Title I programs and thus constitute a small subsample of projects. However, every such program we located reported a minimum of a month gain on standardized tests of verbal ability for every month of school. . .Thus, although we might wish for more data to justify a conclusion that structured programs are more consistently successful than general enrichment programs in producing 1:1 gains, we did not find any evidence which would lead us to reject the idea. (pp. 2-3)

Averch et al. (1971a, 1971b) are two versions of a carefully executed RAND study about the effectiveness of schooling. Laboratory controlled experimental evidence as well as evidence from large scale interventions and "natural experiments" were examined:

> Work on the presentation of material suggest that it is not so much the medium of instruction that is important as its sequencing and organization. (1971a, p. xiii)
>
> In particular, pupils from disadvantaged socioeconomic backgrounds tend to show greater progress in more highly structured programs. However, there is considerable evidence that many of the short-run gains from educational interventions fade away after two or three years *if they are not reinforced*. Also, this 'fade out' is much greater for the more highly structured programs, *which are most unlike regular public school practice*. (1971b, p. 151; emphasis added)

The finding of only short-term effects can be explained in part by the lack of sustained follow through and reinforcement of basic skill learning in regular classrooms. For instance, according to the U.S. Department of Health, Education and Welfare (1972):[3]

> Although the children in the [Follow Through] evaluation are scheduled to participate in Follow Through projects for 2-3 more years (through completion of third grade), the evaluation showed that after 1-2 years in the program. . . .Follow Through's effects on achievement were largest in magnitude and most consistent in Structured Academic approaches--those approaches emphasizing the teaching of academic information through sequentially structured activities and frequent extrinsic reinforcement. The differences between achievement gains of Follow Through children in these approaches and comparison children were statistically significant at both kindergarten and first grade, although the absolute size of differences was once again small. . .(p. 103)

Hawkridge et al. (1969) reviewed and compared successful and unsuccessful projects. They concluded that five characteristics most clearly distinguished successful projects: (1) careful planning and a clear statement of academic objectives; (2) small groups and a high degree of individualized instruction; (3) instruction and material relevant and closely related to objectives; (4) high intensity of treatment; and (5) teacher training in the methods of the program.

Hawkridge et al. (1968) reviewing exemplary compensatory projects, concluded that they are typically teacher directed and prescriptive.

---

[3] Dr. Bissell, one of the principal authors, has since raised serious questions about the validity of the data on which the conclusion is based (personal communication).

Averch et al. (1971b) discuss the Hawkridge, Bissell and other analyses:

> The painstaking work by Hawkridge, Wargo and their associates at the American Institutes of Research, which has already been mentioned, is difficult to summarize briefly because it is composed of descriptive material concerning the successful programs identified. The same is also true of Kiesling's study of successful California Title I and Senate Bill 28 (a California demonstration program) projects. Their results strongly support Bissell's notion of the importance of good program supervision and personnel training ("quality"). Careful planning and good teacher training are mentioned both by Hawkridge at the preschool level and by Kiesling. Hawkridge mentions the careful specification of objectives as being important at all three educational levels. Perhaps this can be interpreted as a quality and as a structure characteristic. (p. 119)

E. Gordon (1971) summarized results of Title I evaluations:

> The tightly structured programmed approach including frequent and immediate feedback to the pupil, combined with a tutorial relationship, individual pacing and somewhat individualized programming are positively associated with accelerated pupil development. (p. 24)

Rutter, Tizard and Whitmore (1970), in a British study of the effects of preschool and elementary school education, found that:

> In primary schools, too, a structured approach is probably more effective with these [socially disadvantaged] children than a permissive program. (p. 367)

Assessment, Individualized Help, Planning and Supervision. We present in this section excerpts of conclusions based on studies of preschool and early elementary programs. They suggest that, beyond sequenced behavioral objectives, successful projects contain provisions for ongoing assessment (diagnosis) and individualized help through instructional services and personnel. Diagnostic capacity involves the ongoing assessment of a child's level of attainment in a particular skill area. For example, in reading instruction one would use diagnostic tests to determine whether a child has mastered initial consonant letter sound skills before instructing him in initial consonant blends.

Most of the evidence cited in the preceding section indicates that successful projects with strong instructional emphasis typically focus on assessment and individualized help as well. This seems natural since it is necessary to start a child at his level of competence in order to systematically build new competencies in sequence.

Center for Educational Policy Research (1971):

> The objectives articulated by structured programs assume diagnosis of need. When the most important needs of a child are defined and made specific, it is more possible to develop the objectives, techniques and methodologies for meeting these needs. (p. 38)

Center for Educational Policy Research (1971):

> Successful programs consistently placed highest priorities on purchase of direct instructional services for the child rather than on equipment or other additions to the educational plant. State Title I administrators with whom we spoke in California, Connecticut and Minnesota made similar observations. . .While this (sic) may be that these spending patterns reflect the fact that the majority of "successful" programs are found in the more affluent districts whose equipment needs may not be as great, it also may be that Title I children receive greater educational benefits from increased teacher time and attention rather than from overhead slide projectors and the like. And, incidentally, when Title I parents were queried as to their preferences concerning resource allocation, they unanimously opted for more teachers and less "frills" or subsidy services. (pp. 4-5)

Testimony also suggests that projects require extensive planning and careful supervision and training of instructional staff in order to produce better results, both process (implementation) and product (student outcome).

Bissell (1970) found that:

> Preschool programs high on the dimension of quality control, having a well trained staff, a high degree of supervision and a low pupil-teacher ratio, are the most effective programs in producing cognitive gains.

The Center for Educational Policy Research (1971) observed that:

> There is a critical lack of adequate training for teachers and administrators. This is perhaps the most crucial shortcoming of present Title I programs. (p. 5)

Among Title I projects reviewed, it noted that " all structured programs stress inservice training and close supervision of teaching activities" (p. 19).

Weikart (1972):

> Detailed planning for daily operation is absolutely critical... the moment planning as an orgainized force ceases or diminishes in its central focus, program quality drops. Planning brings the adults in the program together and forces an integration of their ideas, so that they respond with purpose to the children. It produces a forward momentum, a pacing to the program that creates novelty and excitement for the children as well as the staff.... While planning integrates the basic content and expression of the program, supervision makes it happen.... Adequate supervision forces the teachers to consider the central issues of their curriculum model. It helps the staff to recognize when they are getting off the track or marking time.... The supervisor provides in-service training based on the knowledge she has gained from her classroom observations.... In order to operate an effective preschool, then, the conclusion suggested by the findings of the Curriculum Demonstration Project is that any project must have an effective staff model which provides at least two major elements: planning and supervision. (pp. 5- 56)

Bissell (1971):

> There was a relationship between the amount of teacher training provided by sponsor and success in implementation. The models with the most teacher training and support--the Preacademic models--ranked highest in implementation. (p. 14)

Analysis of the Efficacy of Increased Structure and Management in Primary Grades

There is no rigorous derivation from psychological research toward structure in education, because there is no one clear line from psychology towards human learning and from human learning towards education. Nonetheless, certain characteristics of the teaching-learning situation in the classroom together with an analysis of the basic skill attainments expected of primary school children suggest how increased structure might be associated with enhanced achievement in the primary grades.

Most teaching is much "noisier" than it is intended to be. A child spends effort finding out what he is supposed to pay attention to and what he is supposed to do. This processing demands effort--literally evoking muscular tension--and it takes part of the capacity from a finite capacity learning and behavior regulation system in the child. Structure and management routines tend to reduce the noisiness. Typically, the child is more isolated from noise, given a very explicit localized set of stimulus materials to deal with and a very explicit localized set of responses to deliver. He is faced with a string of very simple, sequenced tasks and receives frequent clear signals (feedback or reinforcement) that tell him where he is going and motivate him to go further.

In the first three grades of school one of the fundamental learning problems the child faces is the "decoding or symbol learning phase", especially in reading. He must also learn to follow routines which he may not have confronted previously, such as reading print from left to right, from top to bottom. It seems reasonable to believe that these ought to be established in children, even overtraining them to the point where they are "automated". These skills are fundamentally sensorimotor skills which must be established by repeated trials during which the skills are practiced. We accept the fact that a child will not become a writer simply by skill teaching; we simply wish to make sure of the substrate motor ability. This will tend to maximize the standard achievement tests of the first three grades which test for those motor skills. We are also trying to avoid moving so swiftly through technique that the child becomes bewildered, discouraged and hence defeated.

The assumption is made that in so maximizing the immediate goals of early grades, we are not seriously hurting or destroying the later capacity of the child to build up from the established motor skills toward a higher-order ability. Does increased structure and management for basic skill learning with its emphasis on reinforcement and feedback violate other desirable values such as recognition of complexity, initiative, and creativity? This problem is discussed in more detail in the next part. Here it will only be noted that there is considerable evidence and testimony that lack of attainment of skills causes serious demoralization in older elementary and high school students who cannot properly and efficiently perform simple skills in reading and arithmetic.

## Arguments Opposing Increased Classroom Structure

Objections to this recommended strategy of increasing structure and management in the classroom fall into three categories: methodological critiques of studies; feasibility issues; and criticisms of the skill-achievement goal emphasis. Each will be briefly set forth and discussed.

Methodological critiques. None of the evidence presented in Chapters 7 and 8 and reviewed in the preceding section is without problems either of internal validity, of generalizability, or of both. Rarely are children randomly assigned to experimental control groups; instead, matched comparison groups serve as controls. Statistically, significant differences between scores are not always educationally significant even in the short run. Follow-up studies and longitudinal data are not commonly presented in elementary school studies. In preschool studies, effects lasting for three or more years after treatment, although attenuated, have been found for some structured programs.

Despite the problems mentioned above, we feel that the evidence presented in Chapters 7 and 8 is reasonably conclusive regarding short-term gains in basic skill achievement.[4]

---

[4] Major exception to the general finding of superior achievement results following increased structure and management are the generally inconclusive gains recently reported from performance contracting experiments involve not only changes in classroom structure but also changes in the entire (continued)

This important goal of schooling will not be sustained unless future school experiences reinforce and build in early basic skill attainment. We therefore disagree with the conclusion of Averch et al. (1971) that:

> ...research has not identified a variant of the existing system that is consistently related to a student's educational outcomes.... In short research has not discovered any educational practice (or set of practices) that offers a high probability of success over time and place. (pp. x-xi)

We agree with Averch that in order to fully improve skill-achievement teaching, more research should be focused on the interaction between structure and student characteristics. One teaching strategy or method is not best for all students; there is already some evidence of this (for reviews see Averch et al., 1971 b, pp. 59-60, 77-90; Bar-Yam, 1969; Bissell, 1970). But average achievement, especially among lower-income children, does seem to be enhanced by more structured programs in the primary grades.

Feasibility issues. One major objection is that while small-scale, carefully nurtured demonstration projects work well, vital elements of structure and management are ignored or severely circumscribed once they become operational on a large scale. Thus successful results are attenuated or disappear. While the possibility for such dilution of treatment does exist, it need not happen and may occur less in a program with increased structure and emphasis on management. Evidence cited in Chapter 8 from observational data on operational preschools, such as Head Start Planned Variations, shows that highly structured projects are more likely to be able to successfully export curriculum materials and teacher training methods (Bissell, 1971; Miller et al., 1971; Parker and Day, 1972). Weikart (1972) also observes that more structured programs are generally easier to implement and less susceptible to background differences in teacher character and quality.

Another feasibility objection is high cost. More structured programs, like all compensatory efforts, may cost more in the short run. But they need not cost more than alternative strategies for compensatory education (such as reduced classroom size, more audio-visual material, improved

---

(continuation of footnote preceding page) system of public schooling. It is plausible to expect that at the early stages of such a radical systemic reorganization, the confusion and disorganization might confound the beneficial effects of increased structure and management at the classroom level. Ancedotal testimony of performance contracting experiments gives ample justification for this suspicion (Hall et al., 1972). Given a period of readjustment, one would expect that, if the contractor implemented structure in the classroom, greater achievement would be detected in the primary grades. On the other hand, given the multiple goals of public schooling, a systemic reform like performance contracting ought not be judged solely on its ability to raise achievement scores.

teacher qualification) and may in fact be the least costly compensatory strategy. Three additional cost elements implied by increased structure and management are added diagnostic, instructional and training-supervision capabilities. Diagnostic and instructional capability can be furnished in part by the judicious use of machines, and in part by people. If widely implemented, machines (especially computers and possibly audio-visual technology) will be less costly per pupil. But trained personnel need not be expensive professionals, either for diagnostic or for instructional effectiveness. Nor need instructional personnel work with pupils individually. Equally effective individualized instruction can take place in small groups as well as in more expensive diagnostic and remedial clinics (Center for Educational Policy Research, 1971).

Finally it is alleged that a sweeping reform like increased classroom structure and management in local schools is an impossible and foolhardy task for federal effort. After all, the federal contribution to public school expenditures is only a small fraction of total costs, and the old traditions of local autonomy and state responsibility as well as new demands for teacher autonomy by unions militate against significant federal initiative. While substantial obstacles exist to effecting such reform, the federal government is presently spending a lot of money for public schools. Its share of costs and responsibilities has been growing and will continue to grow. If federal monies are to have their intended impact, they should be intelligently focused to achieve mandated goals. In the final section of this recommendation, we propose practical steps which, while not insuring overwhelming acceptance or overnight change in schools, represent one viable and practical approach to the use of federal funds in public schools.

Goal-Emphasis and Means. Objections can be raised that the recommendation ignores many of the fundamental purposes of public elementary schools, such as socialization, citizenship, esthetic appreciation and physical development. Schools are not solely concerned with basic skill achievement even in the early elementary grades. A related objection is that structured programs as defined in the recommendation will have inevitable side effects, some of which may be harmful to a child's cognitive and affective development. Finally, basic skill achievement in reading and arithmetic may not make much difference to a disadvantaged child's future success as measured by his adult social status and income. We will consider these objections in order.

The amount of time in the primary school day devoted to basic skill achievement in reading and arithmetic varies; it need not be more than one-third (see the Diversify Education recommendation in this chapter for further discussion). This leaves the rest of the school day for purposes other than basic skill achievement, such as development and nurturance of creativity, artistic appreciation and competence, abstract reasoning and problem solving, socialization, moral development, physical development, and so forth.

Does the increased structure and management beneficial for basic skill teaching violate or impede the attainment of other goals? There is some research which suggests that children taught by a highly structured method tend to look at answers in terms of correctness and incorrectness, that aspects of response style as measured by their approach to questions on the Stanford-Binet IQ test reflect less curiosity and inventiveness, and more dependence on the program. Critics of this highly structured program as well as other radical critics of schools believe that by focusing on methods that stress rightness and wrongness, schools destroy independence and creativity and equip children poorly for the complexities and ambiguities in the real world (Averch et al., 1971a). Whether or not this preliminary evidence will be replicated, it is still necessary to confront the argument that increased structure will destroy creativity, independence and curiosity.

Structure must be used in classrooms in a limited and intelligent way. Not more than one-third of a primary school day need be spent on structured instruction in basic skills. Like any powerful tool, structure can be abused--by teachers who ignore children's needs or who structure inappropriate kinds of learning tasks or tasks designed to enhance other kinds of child development. The possibility of abuse of the methods should not be ignored. However, we feel that the "professionalism" of instructional personnel together with parent involvement (recommended in the Work With the Family section) will guard against abuse. The possible misuse of a teaching method is not a respectable argument against its use if effective safeguards exist.

It is true, however, that structured teaching will not only have positive transference, enhancing other important skill learning, but will probably also induce some negative transference. Any alternative strategy which succeeds, including open education or discovery learning, will also create both positive and negative transference. One pays a price for either "structure" or "discovery". In neither case does the evidence suggest that this negative transference is more than temporary. Against the possibility of short-term negative transference from structured programs, one must weigh the undeniable benefit both to the child and to society of efficient learning of vital basic skills which underlie more complex cognitive tasks required in later grades, and which provide the intrinsic reward attendant upon competence and mastery.

Apart from the criticism that more structure will vitiate creativity and independence, it is sometimes said that structured programs emphasizing careful assessment may foster labeling practices which stigmatize the child rather than help him. One can note, however, that unlike currently used norm-referenced IQ and achievement tests which provide only summary scores, diagnostic assessment would provide a detailed, highly specific picture of strengths and weaknesses in specific skill areas.

There is considerable evidence that a child's cognitive or standardized test scores are not very good direct predicators of future status and income (Gintis, 1971; Jencks, 1972, in press). Nonetheless, one need not justify the teaching of basic skills on any rationale beyond the undoubted intrinsic importance of reading and computational ability.

How convincing, then are the objections in controverting the recommendation for increased classroom structure and management? The methodological objections, while technically unassailable, miss the important overall finding: a considerable accumulation of studies undertaken in diverse parts of the country indicate that more structured programs are almost always more successful in terms of basic skill achievement. Feasibility objections should not deter the existing "rational" planning component of federal educational policy from exerting its force in favor of more structured and better managed initiatives in federal policy toward public schools. While increased costs are probably associated with compensatory efforts in the short-run, there is no reason to believe that a push for increased structure will be more expensive than other policy moves and there is good reason for anticipating a long-run cost benefit, once technology is able to assist in diagnosis and instruction. As for objections centering around the value issues, we note that the federal government has on many occasions expressed a legitimate concern for the lack of basic skill achievement in school-age youngsters, especially among lower-income children. Moves to correct this problem are clearly within the purview of legitimate federal action, and indeed have become pervasive since the passage of the Elementary and Secondary Education Act of 1965. It is equally true that there are important federal, state and local interests in public schooling apart from the ones considered in this recommendation. But for this one interest--increased basic skill achievement--the most efficacious way to proceed is by increased structure and management. Certain problems can be anticipated. Safeguards are therefore necessary to minimize the potential dangers arising from abuse and misuse of structure.

## The Ineffectiveness of "Traditional" Reform

Alternative means and policies for changing primary schools' achievement outcome will be explored in this final section justifying our recommendation. We list the proposed alternatives and cite illustrative studies which have examined them. Generally the studies find inconsistent outcomes in terms of skill achievement changes of pupils. The alternatives often considered on the agenda of "traditional" reform are: specific curricula, class size, homogenious grouping, ethnic background of teachers, teacher quality, and the preschool background of the child. We end this section with excerpts from major reviews of the effects of the above alternatives. No generally existent variation in any of the above factors seems to have a consistent and statistically or educationally significant association with achievement of primary school pupils. The evidence indirectly supports our recommendation by suggesting that merely appropriating more money to schools--so that they can proceed to compensate in traditional ways--will have no major effect on student achievement. The necessity for structural changes is thereby indirectly indicated. For a more thorough list of references see Gage, 1963; Stephens, 1967; and review articles in the journal, Review of Educational Research.

Proposed strategy: Instructional gadgets, technology.

Evidence: Allen, 1971; Chu and Schramm, 1967; Cranbach and Snow, 1969; Gotkin and McSweeney, 1967; Saettler, 1968.

Proposed strategy: New elementary school curricula in reading and other basic skill areas.

Evidence: Cronbach, 1966; Morris, 1966; Pritchard et al., 1940; Risley, 1972; Rosenshine, 1970; Smith, 1969; Weikart et al., 1970; Welch, 1969; Westbury, 1970.

Proposed strategy: Reduced class size.

Evidence: Ekstrom, 1959; Fleming, 1959; Goldberg et al., 1966; Jencks, 1972 in press; Marklund, 1963; Peaker, 1967; Wever, 1971.

Proposed strategy: Ethnic background of teacher same as students'.

Evidence: Coleman et al., 1966; Wever, 1971.

Proposed strategy: Improve teacher quality, i.e. experience, credentials, verbal ability.

Evidence: Bissell, 1971; Coleman et al., 1966; Domas and Tiedman, 1950; Jencks, 1972, in press; Rolfe, 1945; Fosenshine, 1971; Rosteker, 1945; St. John, 1970; Wever, 1971.

Proposed strategy: Provide entering children with preschool.

Evidence: Bereiter, 1972; Cicirelli et al., 1969; Erickson et al., 1969; Miller et al., 1971; Weber, 1971.

Major reviews:
Averch, et al., 1971b:

The findings from numerous surveys of these (large-scale intervention) programs, a majority of which are for Title I, are that with the possible exception of the Follow-Through program, there is very little convincing evidence from existing measures leading one to believe that the resources invested have made much difference in the progress of children from disadvantaged environments. (p. 102)

Virtually without exception, all the surveys of large, national compensatory education programs have shown no beneficial results on average. However, the evaluations on which the surveys report are often based upon suspect research designs. (p. 151)

Increasing expenditures on traditional educational practices is not likely to improve educational outcomes substantially. (p. xii)

Jencks, 1972, in press:

> Title I programs are worse than the status quo as often as they are better... These findings are not altogether surprising. These programs have often been poorly managed. Sometimes the funds have been misspent. Often they have been widely diffused. Their aims are typically hard to pin down. Most announce improved reading or mathematics achievement as their principal goal, but many also seek to improve students' self-concept, eliminate truancy, prevent drop-outs, improve school-community relations, increase parent involvement, or prevent falling arches. Very few of these programs have done anything radically new. Most assume that what disadvantaged children need is pretty much what they have been getting, only more; more teachers, more specialists, more books, more audio-visual devices, more trips to museums, and so forth. The quality of children's experience is seldom changed, so we should not expect the result to change. (p. 186)
>
> Legislators, school boards and school superintendents cannot expect that any general policy which simply provides more school resources will raise children's test scores.... (p. 192)
>
> The research we have been discussing has one major limitation. It deals only with the effects of extra resources in existing public schools. It tells us that if schools continue to use their resources as they now do, giving them more resources will not change the child's test scores. If schools used their resources differently, however, additional resources might conceivably have larger payoffs. (p. 193)

Programs

Below is a list of programs through which federal leverage might be applied in an effort to induce local school districts and schools to emphasize increased structure and management. (Program numbers refer to Appendix III B.) At present, the largest single source of federal funds among these programs is Title I, Elementary and Secondary Education Act. Hence, if money is to be used to exert leverage, Title I programs would logically be one of the most important places to initiate implementation of this recommendation.

| Program # | |
|---|---|
| 1-2 | Preschool elementary and secondary personnel development grants to states-OE |
| 1-3 | Educational classroom personnel training, early childhood-OE |
| 2-2 | Educational personnel development supplementary personnel-OE |
| 2-3 | Teacher Corps Operation and Training-ACTION |
| 3-1 | Educational Staff Training, More Effective School Personnel Utilization-OE |
| 3-2 | Educational Staff Training, Teacher Leadership Development-OE |
| 4-2 | Research and Development Centers-OE |
| 4-3 | Supplementary Educational Centers and Services-OE |
| 5-1 | Research and Development, Educational Laboratories-OE |
| 5-2 | Research and Development, General Education Profect Research-OE |
| 5-3 | Education research, Experimental Schools-OE |
| 6-3 | Educational research, Major Pilot Profects-OE |

9-1 Head Start-OCD
9-2 Follow-Through-OE
26-1 Educationally Deprived Children, Special Grants, Urban and Rural Schools-OE
26-2 Educationally Deprived Children, Special Incentive Grants-OE
27-1 Educationally Deprived Children, local Educational Agencies-OE
27-2 Educationally Deprived Children, State Administation-OE
46-1 Educational Personnel Training Grants, COP-OE
73-2 Trainers of Teacher Trainers-OE
76-1 Educational research, dissemination ERIC-OE
76-2 Educational research, statistical surveys-OE

Specific Recommendations

There are three ways the federal government could move to encourage increased structure and management:

(1) by providing incentives primarily in the form of (compensatory education) money tied to conditions designed to encourage adoption of the recommended strategy:

(2) by providing technical assistance and information; and

(3) by creating demonstration pro ects.

The first means would be restricted to the local school districts which by law presently receive supplementary federal funds, while the second and third ways could influence all schools. Possible moves will be listed below. It should be noted that these specific recommendations are not intended to cover the entire range of federal interest in public school education; rather we are concerned only with those steps furthering the strategy of increasing structure and management.[5]

---

[5] A comparison of these recommended steps with those proposed for the "Right to Read" program reveals:

--The "Right to Read" Program covers age groups from kindergarten to adults. This recommendation is concerned primarily with primary school age children grades K or 1 to 3.

--No recommended strategy is endorsed by "Right to Read". While this recommendation endorses no specific "model", it does take a position for highly structured strategies for the age group identified.

--"Right to Read" is funded outside the major existing federal compensatory education program. We recommend trying Title I funds as much as possible to implement increased structure.

--Both implementation recommendations propose demonstation projects, dissemination of information and technical assistance, public information, and encouraging state education agencies. However, we recommend (continued)

Present Title I guidelines mandating parent participation on Title I boards might also strengthen the pressure on local schools to orient themselves specifically toward achievement goals and toward hiring additional instructional and diagnostic personnel. Surveys of parents of Title I children find that parent preferences are consonant with our recommendation (Center for Educational Policy Research, 1971).

I. Encourage strong instructional emphasis on primary school programs:
  --Making all or some compensatory education funds contingent on publication of standardized score results on tests of basic skill competence. We believe that this requirement together with active parent participation would cause increased pressure on local schools to emphasize basic skill-achievement goals (for a more skeptical judgment, see Cohen, 1970).
  --Setting up, possibly through state grants, model schools which exemplify strong instructional emphasis.
  --Dissemination of information about successful implementation and results of more structured profects, not only to school administrators and teachers but also to parent advisory groups, organized interest groups in education and local school boards.
  --Creating model teacher education programs such as the Teacher Corps together with active liaison requirements with local school systems.

II. Encourage increased assessment capability in the classroom by:
  --Writing strict guidelines for Title I requiring implementation of diagnostic assessment through hiring of diagnostic classroom personnel.
  --Providing in-service training for professional teachers in diagnostic skills in primary-level reading and other basic skill achievement.
  --Funding training programs for diagnostic personnel in educational personnel funding.
  --Providing incentives for the purchase of diagnostic and feedback materials.

III. Increase the amount of individualized instruction by:
  --Supporting the training of paraprofessionals and teacher aides for instructional purposes.
  --Targeting compensatory aid through guidelines toward hiring additional instructional personnel in the classroom and toward purchasing of instructional machines.
  --Funding innovative projects embodying differentiated staffing.
  --Funding model schools which exemplify the strategy of increased structure and provide for liaison with local schools.

IV. Improve management, planning and supervision skills among teachers and administrators.

---

(continuation of footnote preceding page) specific provision of information, assistance, and service to parent advisory and other organized parent groups and to local school boards as well as through the formal administrative structure of public schools.

--Unfortunately, we have found no convincing evidence in the literature on efficacious ways to train teachers, principals, and administators in management and supervision. Therfore we can only emphasize the importance of this function and express hope that a combination of pressures for achievement gains and local creativity will result in selection of those teachers and administators who have the talent and ablility in management, planning and supervision.

## II. Diversify Education

The recommendation to diversify education essentially means to broaden the range of activities emphasized in the classroom which are considered a legitimate part of the child's education and for which the child is rewarded and receives prestige. Equal time would not necessarily be spent on all activities, but the child's achievements in all would be considered important. For example, the basic skills (reading, writing, arithmetic), visual, manual or constructive skills would all be emphasized. Diversifying education and increasing structure in teaching the basic skills (i.e., behavioral objectives, diagnosis of each child's needs and instruction tailored to those needs) are complementary recommendations. There is evidence that by increasing structure as we have defined it, the efficiency and effectiveness of basic skills instruction will increase. The portion of the school day remaining after basic skill instruction can then be spent in activities which foster the development of other diverse skills.

Diversifying education in this manner is one way to obtain individualization in the classroom, for each child would have increased opportunity to develop his particular talents. Because recognition would be awarded for various types of "success", children would not have to compete for rewards solely on the basis of proficiency in the basic skills. Respects for a variety of abilities would be fostered as children observed their own strengths and weaknesses and were encouraged to acknowledge the diversity of abilities in others.

This recommendation, as we have pointed out in introducing this chapter, is somewhat different from the others. It does not flow directly from our data analysis; but rather from some judgments made during the course of our review and analysis. And it is a recommendation for a new emphasis in programs which, to be well integrated, would require a reasonable period of research, development, and exploratory curriculum efforts.

Two main bodies of information are used to develop the argument that schools should be diversified--information on the existence of different mental abilities and on individual differences in patterns of abilities, and information on the types of skills most emphasized and rewarded in the educational system and the effects of those emphases.

### Mental Abilities

IQ is most commonly thought of as a unitary capacity or single fund of "mental energy" which individuals possess to a greater or lesser degree. When Binet and Simon developed their test for the prediction of school failure, the test provided one score--a mental-age score. Several years later, this mental-age score divided by actual chronological age became the "intelligence quotient" or "IQ". However, even before this development, Binet and Henri (1896), noting that children performed differently on memory tests, hypothesized that five distinct memory abilities existed: visual memory, memory for sentences, memory for musical tones, memory for colors, and memory for digits. In 1909, Binet commented on the complexity of intelligence: "...the mental faculties of each subject are independent and unequal; with little memory there may be associated much judgment...Our mental tests, always special in their scope, are each appropriate to the analysis of a single faculty" (in Guilford, 1967, p. 12). In spite of Binet's reservations and those others have expressed since, the IQ test, providing one score of "intelligence", has enjoyed enormous popularity.

With the development of the statistical method of factor analysis, evidence for the existence of distinct mental abilities began to accumulate. Factor analysis is a way of statistically clustering correlations. Factor analyses of performance on a variety of mental tests have typically identified a number of clusters each of which hypothesize to indicate the existence of a specific ability. The global IQ score may be thought of as similar to a general athletic ability score and while the total score may enable ranking of individuals, it will not separate the basketball player from the discus thrower.

Spearman pioneered much of the work using factor analysis, deriving a large general pervasive factor (g) and several more specific factors which appeared to vary with the test involved. Thurstone then further developed the use of factor analysis to separate different mental abilities. Thurstone and Thurstone (1943, 1958) identified seven factors which comprise what they term the primary mental abilities: verbal comprehension; word fluency; number; space; associative memory; perceptual speed; and induction (or general reasoning). A variety of factor analytic studies of mental abilities have been conducted, with Cattell and Guilford being two major researchers in the area. (See Guilford, 1967, or Cattell, 1971, for a review of this literature). Factor analyses of the performance of children on tests of mental ability commonly isolate four or five main factors (e.g., Cohen, 1959; Damarin & Cattell, 1968; Meyers et al., 1962, 1964). Meyers et al. (1964) analyzed the perfornace of approximately 90 children at each of the ages 2, 4, and 6 on a series of tests designed to measure hand-eye psychomotor ability, perceptual speed, linguistic (verbal) ability, and figural reasoning (spatial) ability. The results supported the existence of the four abilities hypothesized.

Although the factors identified through different factor analyses are not always the same, perhaps because factor analysis is such a difficult and sensitive procedure, the existence of different mental abilities is extremely well documented. Almost all factor analytic studies do isolate two main factors, however. They are verbal and spatial, or, according to Smith (1964), verbal-numerical and spatial-mechanical-practical abilities.

A child or adult who scores high on a test of one ability will not necessarily score equally high on a test of a different ability. There are individual differences in the patterning of mental abilities. Indeed, if a "gifted" child were defined as one who is in the top 10% on at least one of Thurstone's Primary Mental Abilities Tests, 60% of all children would be considered gifted (Bloom, 1963). Guilford (1967) notes that "unevenness in profiles is found throughout the range of general intellectual level, from the mentally deficient to the near-genius level" (p. 27).

In addition to the different patterns of mental abilities, more recent research has demonstrated individual differences in approach to information gathering, i.e., differences in "cognitive" style (Kagan et al., 1963; Kagan & Kogan, 1970; Witkin et al., 1954; Witkin et al., 1962). Still another body of research has found that although most correlations among performance on various learning tasks are positive, they are typically very low. A number of researchers (Duncanson, 1964; Stake, 1961; Stevenson et al., 1968; Steven & Odom, 1965) have presented children with a variety of different learning tasks and then correlated different measures of performance. The median correlations typically range from about .10 to .30 except in cases where tasks are similar in structure or, at times, similar in content.

Thus from three bodies of literature--that on mental abilities, cognitive style, and interrelations among learning tasks--a picture of intellectual functioning emerges that is both variegated and systematic. There is considerable consensus on the primary types of mental abilities --verbal-numerical and spatial-mechanical-practical. Furthermore, there is evidence for individual differences in the patterning of abilities and for the existence of different cognitive styles.

## The Educational System

Although there is ample evidence that different abilities exist and evidence that different abilities are required for different occupations,[6] schools typically foster and reward the development of verbal ability to a greater extent than they foster and reward the development of other abilities. Both the means of instruction and the performance expected of students are typically verbal in nature. Most subject matter is taught primarily through verbal means--the spoken or the written word--and performance is typically assessed through verbal means (especially written examinations). This is not to say that schools do not foster the development of other abilities. Indeed, schools may have art and vocational education courses, and laboratory courses in chemistry, biology, and physics. Athletics are extremely important in many elementary and secondary schools; audio-visual materials are used; and "projects" (making, building, demonstrating) are required in some classes. However, verbal techniques of teaching and of evaluation constitute the "core" of most school programs. Other activities are typically considered supplementary rather than integral.

---

[6] Paralleling evidence that different abilities exist is evidence that these different abilities are needed in various occupations. Ghiselli and Brown (1951) studied the predictive value of various tests for identifying individuals who would be good in different types of work, e.g., recording, computing, protection, vehicle operation, repairing, electrical and machine work, etc. The tests differed in their predictive value for various occupations.

The United States Employment Service has developed a multiple aptitude test battery (the General Aptitude Test Battery) for use in vocational guidance. The test was developed through research on the prediction of vocational success and through use of factorial studies. Eight paper-and pencil tests and four performance tests are used to measure nine distinct factors: (1) General reasoning ability (a composite of Vocabulary, Space Relations, and Arithmetic Reasoning); (2) Verbal aptitude (Vocabulary); (3) Numerical aptitude (Computation, Arithmetic Reasoning); (4) Spatial aptitude (Three-dimensional Space); (5) Form perception (Tool Matching, Form Matching); (6) Clerical perception (Name Comparison); (7) Motor co-ordination (Assemble, [continued on next page]

In this situation the child who comes to school with high spatial ability but less well developed verbal ability is generally in a worse position than the child with high verbal ability but less well developed spatial ability. The praise of the teacher and prestige within the class generally go to the child with high verbal skills, i.e., the child who performs exceptionally well in the "basic" content of elementary school --reading, writing, and arithmetic. (These skills all load on the verbal factor (verbal-numerical) rather than the spatial).

Furthermore, there appears to be a bias in selection procedure for later education in favor of those with high verbal skills. Smith (1964) has reviewed the selection process for admission to English grammar schools and reports they are heavily biased in favor of students with high verbal ability; those with nonverbal strengths--notably spatial ability--fare badly in comparison:

> ...the 11 plus selection procedure [the tests used to determine whether 11 year olds enter grammar school] ...seems to operate moderately successfully from the point of view of its long-term validity for selecting potential arts and medical students, but it appears to give preference to pupils who are likely to be less successful in university science courses.

---

[continued from preceding page] Disassemble); (8) Finger dexterity; and (9) Eye-hand-foot co-ordination.

The Employment Service has published a list of the estimated trait requirements for workers in 4,000 jobs listed in the American Dictionary of Occupational Titles. Different occupations require different skills. Smith (1964) reports that 84 of the jobs listed require a minimum spatial ability equal to that possessed by the 10% of the working population most proficient in spatial ability. The jobs include a high proportion of scientific and technical occupations and some medical and dental occupations (e.g., obstetrician, neurologist, surgeon, and psychiatrist).

> ...there are grounds for suspecting that pupils who might succeed in university science are being rejected because they lack the linguistic abilities required for success in the 11 plus examination. (pp. 28-29)

In our own country Wing and Wallach (1971) have documented that college admissions procedures focus almost singularly on a general intelligence score and grades. Special talents and abilities carry little weight, and an applicant's verbal score on the scholastic aptitude test is the best predictor of college acceptance. Although there is some indication that abilities in addition to general IQ and grades are being considered more frequently and assigned more weight at some institutions, the overall picture remains the same. They argue that this emphasis on academic skills serves to homogenize the interests and talents of the entering student body. Furthermore, over the course of four years further intellectual "inbreeding" occurs:

> ...students learn a great deal from each other during the college years--perhaps even more than they learn from their instructors. To the degree that students at any college are different from one another in the sense of representing a diversity of talents, rather than homogeneous in the sense of possessing the same rarefied levels of academic skills (as the major characteristics distinguishing them from the applicants who were rejected) greater learning increments will result from their spending four years in the same environment. (Wing & Wallach, 1971, p. 148)

A desirable diversity will not be encouraged by an overwhelming reliance on verbal abilities. Yet the colleges' desire for such abilities has led secondary and primary schools to emphasize them; indeed, according to Wing and Wallach (1971):

> It is inevitable that a strong determinant of what primary and secondary school education are like is provided by the character of the entrance requirements to the more prestigious institutions of higher education. To the extent that these requirements emphasize small differentiations within the upper sector of the score distribution on intelligence tests, and small increments within the upper range on grades awarded for assimilating maximal amounts of traditional academic curriculum materials, strong pressure exists below the point of college entrance to concentrate on preparing youngsters to do well on that sort of test and to earn higher grades on that sort of pedagogical fare. ...The basic orientation of primary and secondary school education is therefore heavily influenced by the nature of college admissions requirements. If encouraging the broadening and reforming of primary and secondary school curricula is to be as convincing and effective as possible, serious changes must take place in the requirements for getting into the more prestigious colleges. (p. 148)

Wing and Wallach are arguing for the liberalization of college entrance requirements, but they might equally well be stating the case for diversified education at lower levels--a case for seeing that earlier stages in education become environments in which all children have a chance to develop their particular abilities, and not just the ability *presently* necessary to gain admittance to higher education.

## Possible Effects on Child Interest and Morale

One of the most immediate effects of diversifying education would probably occur in the child's enjoyment of, and feelings about himself --especially in the case of the child who is not highly successful in reading and arithmetic.

The "success" of a child at elementary school is now judged primarily on the basis of his mastery of the basic skills. If the child does well on the basic subjects he is a "winner"; if he does poorly, he is a "loser". Diversification of the activities a child may pursue during the school day would enlarge the arena within which each can excel, and would allow those who are not exceptional in basic content areas to exhibit their particular abilities in other areas. This might be particularly beneficial in removing pressure from the child who is not "ready" for reading instruction but who can participate successfully in other activities. It is impossible to say just what ultimate effect diversification might have, but it is apparent that an individual's feeling about himself influences his interactions with others, his aspirations, and, in general, his attitude toward life.

In addition to increasing the number of "winners" in the school system, diversification would simply make school a more interesting place to more children. When children have an opportunity to engage in activities that interest them or that they do well, they are happier, more satisfied with school, and are more highly motivated. School, in other words, becomes more "relevant". The current proliferation of books on alternatives to education testifies to the fact that there is dissatisfaction with the school system as it now stands. Critics of the current school system (e.g., Holt, 1970; Silberman, 1970; Illich, 1971) stress its meaninglessness, its emphasis on irrelevant facts and skills, and its failure to foster individual and creative growth. Averch et al. (1971) have reviewed this reform literature, which they term the "experiential approach". They conclude that:

> There is a striking similarity in the prescription these writers offer for education; the differences are mostly a matter of degree and political feasibility...The writers agree that at least part of the solution is to have less formally structured classrooms in which the student can devleop more or less unhindered by demands for conformity. (p. 140)

The "open classroom" is the alternative many reform writers advance. The notion of the "open classroom" (which is quite complex and varies among educators) and the notion we are advancing are similar in that they both involve an increase in the range of activities available for the students. The "open classroom" also typically entails less structure or a very unobtrusive form of structure; it is here that our recommendation differs from an advocacy of the open classroom. While the appropriate structure for various activities would have to be decided for each activity individually, at least in the early years we would suggest that, rather than doing only what they choose, all children be included in all activities (although not necessarily to the same extent) in order to acquaint them with the variety and enlarge their range of options. Even beyond this acquaintance period, we feel that children should share in each other's experiences and interests while more specifically developing their own competences. The intended effect is to make each child not only recognize his own abilities but the equivalent yet different abilities of other children.

In sum, there is ample evidence for the existence of individual differences in patterns of mental abilities and different cognitive styles. All occupations do not require the same abilities. However, it appears that schools tend to reinforce academic skills which are primarily verbal in nature more than they do other skills, especially spatial skills (which include art, draughtsmanship, mechanical sciences, and the like).

We would recommend that education be diversified, i.e., that more emphasis be given to skills other than the basic academic skills. We are certainly not recommending that the basic skills be ignored. It is essential that children learn reading and arithmetic. But other subjects and activities should also be considered important. Diversification could have several important benefits. It would foster the development of each child's abilities; it would enable more children to be "winners" in the school system; it would increase interest in school for those children whose talents and interests lie in fields other than the academic (e.g., art, music); and it ties in well with career education, which is currently being emphasized by the Commissioner of Education. These latter two positive aspects might eventually lower the drop-out rate through an increase in the perceived relevancy of the school, and diversification combined with career education would better prepare students for future employment.

## A Case for Spatial Ability

The most basic implication of the discussion above is the need for deemphasis of verbal ability as the primary criterion of student ability. There is at least one rather well identified and meaningful candidate for a complement to verbal ability: spatial ability. In 1964 I. M. Smith summarized the evidence on the importance of spatial ability for a number of occupational roles. His book Spatial Ability was in essence an appeal to the English educational establishment to end their one-sided emphasis on and reward of verbal ability. In the 1960's England was suffering from a shortage of engineering, mathematical, and technical manpower. Smith argued that the selection procedures for admission to grammar schools and to most technical schools served to maintain this shortage by differentially and inappropriately rewarding verbal skills over spatial skills. He reviewed factor analytic work and follow-up studies of individuals who had taken various tests of mental abilities, and he even explored the relationship between spatial ability and temperament. Some of the conclusions he reached follow:

> Current selection procedures for admission to grammar schools and to most technical schools give greater weight to verbal abilities than to spatial abilities. As a consequence, in these schools the proportion of pupils with high spatial ability is very much less than the proportion with high verbal ability.
>
> A survey of research on spatial abilities shows that many types of spatial test have validity for selecting candidates for numerous technical and scientific courses and occupations.
>
> Follow-up studies show that spatial ability may contribute to success in G.C.E. and other examinations in mathematics, art, mechanical science, and in many technical subjects, such as engineering drawing, metalwork, woodwork, handicraft, building drawing, and building geometry.
>
> By including a spatial test in the battery of tests used for selecting pupils for such courses, the number of pupils likely to succeed could be substantially increased.
>
> The follow-up studies show that the English essay has positive validity for linguistic subjects such as English language, English literature and modern languages, but it may have negative validity for mechanical science and metalwork and negative or near-zero validity for mathematics, physics, chemistry and biology.
>
> The follow-up studies also show that the spatial test may have negative validity for many grammar-school subjects, such as English language, English literature, modern languages, physics, chemistry and biology. The regression coefficients show that for predicting success in these subjects, the spatial test should in general be weighted negatively. The opposite is true, however, for subjects such as mathematics, art, woodwork, metalwork and mechanical science. (Smith, 1964, pp. 292-294)

Although Smith was essentially arguing for an alternative, rather than a complementary, use of spatial tests of competence for further education, his findings also tend to support our view that whatever competence a child has should be recognized. Most particularly, they indicate an area of competence which can be accepted even within the present framework of objective testing and evaluation of child abilities.

### Diversified Education and Career Education

The U. S. Commissioner of Education, Sidney Marland, Jr., has recently suggested that what he calls "career education" be made an integral component of the public school curriculum. Our conception of diversified education and his of career education are not identical, but they are quite clearly compatible. Career education he defines as follows:

> ...What the term "career" education means to me is basically a point of view, a concept--a concept that says three things: First, that career education will be part of the curriculum for all students, not just some. Second, that it will continue throughout a youngster's stay in school, from the first grade through senior high and beyond, if he so elects. And third, that every student leaving school will possess the skills necessary to give him a start in making a livelihood for himself and his family, even if he leaves before completing high school. (U. S. Department of Health, Education, and Welfare, 1971, p. 1)

Two major changes would be required to implement career education. First, curriculum would be changed to familiarize students with various clusters of occupations in elementary school and to allow them to participate in various jobs in secondary school. The second concerns the manner in which classes in the basic subject areas are presented:

> Hand in glove...would go a refocusing of classes in the basic subject areas--math, science, language arts, and social studies --in such a way that these classes were presented in terms of the student's career interests. One of the major benefits of this kind of refocusing would be that school would immediately become more relevant. (U. S. Department of Health, Education, and Welfare, 1971, p. 2)

The Peoria, Illinois school system is one of seven Local Education Agencies that is developing and implementing a school-based career education model. According to the Office of Education, the goals of the Peoria elementary program are to provide each student with

> ...an understanding of careers which serve him, the community and society; an understanding of his own value, including his career role and that of others; increased skill and experience in decision-making; a better understanding of the economic system; and comprehension of the relationship between the world of work and education. (Report on Preschool Education, April 1972, p. 10)

The provision of diversified activities in the elementary years, could be co-ordinated with the types of careers being presented in the secondary school classroom for maximal relevance. Children could learn how their activities are used, at a more advanced level, in various occupations. In secondary school, "diversified education" and "career education" could conceivably merge.

Several major benefits of career education are foreseen. First, school work would become more meaningful and stimulating, thereby increasing motivation. We have advanced this same argument for diversifying education. Second, students would be better prepared for a vocation. Marland is particularly concerned about the inadequate vocational preparation offered by most schools and by the United States youth unemployment rate--the highest in the world. He is concerned about the lack of marketable skills possessed by youth who drop out of school. Career education is viewed as a way to provide youth with skills, whether they leave school before or after graduation. We share this concern, although it does not relate directly to our recommendation. In addition, relevant career education within the school system might significantly lower the number of drop-outs. In our view, the problem is not only that of drop-outs, but also that of students who stay in school but are so disinterested as to be effectively absent.

One possible argument against the diversification of education (and perhaps to a greater degree against career education) is that it could become a form of tracking, separating children into homogeneous ability or interest groups rather than modifying the educational milieu to respond to their heterogeneous needs and abilities. This argument was addressed earlier by our suggestion that, at the elementary level all children experience all activities, thus becoming aware of the diversity in human talents. And, that they be judged in terms of their particular competencies. At the secondary level, however, we would emphasize that flexibility to move in and out of various activities (especially career-related activities) be available at all times.

## Summary

We are recommending that education be diversified--that the range of activities emphasized in the classroom for which a child is rewarded and receives prestige be broadened. The basic skills should be taught in the most efficient manner possible, and the remainder of the day spent in activities which allow each child to exhibit and further develop his particular skills.

A number of different mental abilities exist, with individual differences in the pattern of these abilities. Furthermore, different abilities are needed for various occupations in later life. Schools, however, focus primarily on academic skills, which are mostly verbal in nature and judgments of student ability are based largely on proficiency in academic, verbal skills.

A diversified educational program would allow more children to be "successful" in school, and hopefully would increase interest in school. The notion of diversified education and career education are quite compatible. Descriptions of the career education program at the elementary level, however, have thus far emphasized "familiarization with" and "understanding of" diverse careers; in contrast we are focusing on more child participation in diverse activities. Ideally, these two distinct foci could be related. Although the issue of tracking is not central in Grades 1-5 care must be taken to ensure that diversified education (and career education) would not become tracking in secondary school.

This recommendation is a relatively general statement of a new emphasis for elementary education. Careful thought must be given to the types of activities that would be included in a diversified education program. The verbal-spatial distinction could be used as a starting point, given that the distinction has been well documented and that schools seem to emphasize verbal skills more heavily than spatial skills. Consideration must also be given to how diversified education could be implemented in the school system and what changes in teacher education would be necessary. Thus we are recommending more detailed planning, followed by program research and development, in order to design a more diversified education for children.

## Work with the Family

In this second section of Chapter 13, we are specifically concerned with assessing the merit of six strategies in family intervention: social service referral, parent training for cognitive stimulation of their children, employing parents as teachers of small groups of children, involving parents in decision-making, parent therapy (counseling and therapeutic social casework), and parent education. Underlying recommendations derived from these strategies in family intervention projects, and behind many of the strategies and specific recommendations in preschool and day care (Chapter 12) as well as those in education and health (Chapter 13), is a principle whose importance goes beyond the correctness or incorrectness of specific analyses presented. "Work with the family rather than around it" is a prescriptive general goal of services which should apply to planning and implementation of all public policy directed at children. Concretely, the slogan means that public policy in this area should make families the focus of intervention efforts; should use parents as primary agents of change; and should involve them in policy and administrative decision-making.

Since the mid-nineteenth century, under the combined impact of industrialization, urbanization and immigration, the American family has lost some functions and appears (to some observers) to have become more disrupted. Responsibilities which formerly were entirely in the domain of the family have been supplanted or supplemented by private and public social institutions and especially by professionals within and without these institutions. The trend of public policy has been to replace family functions with public social responsibility at the state and, since the Great Depression, at the federal level. Prominent moves of the last decade such as Title I, Head Start, and day care, having continued to support institutions and professionals possessing "scientific expertise" who work with children directly to "save" them from their disadvantaged families and environments.

Some of this public intervention is motivated by compassion for children "at risk" and to provide care or money for children whose families either cannot or will not provide the level of sustenance and care that society has defined as minimal. Other major factors motivating public intervention are public safety, economic and social good, and public morality. Public actions taken for non-compassionate reasons, such as vocational preparation, assimilation, and regulation of the labor market, have also weakened families by depriving them of important functions. While there is a generally recognized need for public intervention, we believe that the federal government should consciously aim its policies to minimize the potentially and immediately disruptive family weakening aspects of child development programs. It is important that child development policy be structured as far as possible to support and strengthen, rather than supplant, families which are functioning adequately in order to prevent a further undermining of family functions by the public sector, and to bolster the family's ability to cope with stress where such is at present considered to result in less than adequate caretaking. Through the judicious use of strategies listed in this recommendation and in other recommendations in Part III, by working with families rather than around them--specifically by focusing child development programs on families, using parents as agents of change, and involving parents as decision-makers--potential family weakening aspects of public policy in child development can be reduced. It will then be less necessary to rewrite the contract between families and societies in every generation each time taking more responsibility away from families because the previous generation's reforms have further undermined family stability and viability. While not excluding professionals where their expertise is well-founded, it is hoped that the tendency to rely primarily on professional treatment in child development will be reversed. In the long run, the pursuit of such policies would make public interventions less necessary as families are strengthened in their crucial role of shaping their young. No one can predict with much confidence what future generations will have to adapt to. But the experience of centuries provides some indication that families are not to be discarded lightly.

Still, there are practical limits to this recommendation which should be recognized. There will always be some families so inadequate for incontrovertible reasons that some continuing public action is necessary. Care for orphans, for continually abused and neglected children, and for children of severely retarded parents are examples of children "at risk" whose number may diminish but who will never entirely disappear. For some larger social purposes it may be inefficient to employ a family-focused strategy. Where the potential family weakening aspects are minor, it would seem wise to adopt programs which ignore the general precept of working with the family. Examples of such exceptions to be discussed in other recommendations are screening programs in health, institutional treatment for remediable diseases and defects and specialized preschools for the handicapped or non-English speaking child.

For public purposes such as the assimilation and vocational training of children over age six, the public institutional arrangements are firmly established. It would be difficult to envisage a complete reversal of the major public function of public schools, except in the very long run. Similarly, additional public intervention prompted by compassion and equity is required in the field of child health care. In such cases it would be wisest to modify existing arrangements or create new arrangements embodying the principles and recommended strategies in this and other sections of Part III.

## Support from Correlational Evidence

The general argument for working with the family based on correlational evidence is first presented in summary form. It suggests that certain family characteristics are crucial elements in the development of the child. This is true whether the variation in child characteristics is termed a "disadvantage" or merely a difference.[6] Hence, intervention programs should make the family a focus and an agent of change and should involve parents in decision-making roles.

No matter how child disadvantage or differences among children are conceptualized (see Table 2.3), family factors in the form of social class, mother-child interactions, home environment variables, income, race or crisis are always prominently associated with differences among children. Specifically measured family and home environmental variables which have been found to correlate with such differences are: parent educational level; family size; father absence; crowding; scheduling of family routines; amount of mother-child time in verbal interaction; mother-child "mutuality"; maternal teaching style and maternal self-esteem; fathers' morale, and so on (Table 2.4).[7]

Evidence reviewed in Chapter 4 suggests further that home environment and social class factors possibly mediate the effect of perinatal accident on a child's IQ score and school achievement. Among such family characteristics are educational level of parents, housing conditions, mother's intelligence, availability of learning materials, family stability, emotional support, opportunity for identification, and reinforcement patterns. Some investigators have concluded that low-birthweight or perinatally-stressed children whose families rate high on these family characteristics show little or no effect of their perinatal stress. Children with low birthweight or perinatal stress whose families rate low on the above family characteristics are affected far more severely

---

[6] We have strongly argued in this paper against the use of the term "disadvantaged" to classify broad categories of children and families. Part of the objection resides in the unhelpful and inaccurate lumping of different child and family traits under one umbrella. Perhaps one or more of these traits do cause immediate or future problems, but rarely are most traits invoked by "disadvantage" found in one child, one family, or one particular income group. Oversimplistic labeling obscures such differences and often results in programs for the wrong children and the wrong families. A second and even more serious objection is the implication associated with "disadvantage". It is taken to imply that if a problem exists, it is the "fault" of the child or his family. But it is rarely clear that an alleged "deficit" or disadvantage must be remedied by fixing the child (family) rather than by reforming an unjust social practice or institution. To judge that all trait differences between poor (or lower-social-class or minority-ethnic groups) and non-poor children and families are ipso facto deficits of the poor and advantages of the non-poor unfairly and incorrectly stigmatizes children and families.

[7] Dave (1963) found that an overall index of home environment (academic guidance, achievement values, language models, general learning stimulation, etc.) correlated .80 with student achievement of .50 for SES.

(Douglas, 1956; Drillien, 1964; Illsley, 1966; McDonald, 1964; Werner et al., 1971).

There is parallel evidence that suggests that father absence by itself may not be a cause of lower achievement, pre-delinquent behavior or (with less certainty) unhealthy psychological adjustment for boys, when the effects of other home and family environmental factors like level of income, family stress, family cohesiveness and discipline and supervision of the boy by his mother (Coleman et al., 1966; Deutsch, 1960; Eisner, 1966; Ferguson, 1952; Glueck and Glueck, 1962; Herzog and Sudia, 1970; Hess et al., 1968; Levinson, 1968; McCord et al., 1962; Nye, 1958; Slocum and Stone, 1963; Tabler et al., 1968; Willie, 1967; A. B. Wilson, 1967). Almost all studies which support the causal role of father absence in producing undesirable child outcomes have failed to control for these family factors or are isolated, non-replicated studies done on subjects in other cultural contexts (Chapter 4). But whether father absence is one direct cause or merely a contributing factor interacting with other family traits like stress, climate, and discipline, the prominent role of the family cannot be denied.

In delinquency prediction and correlational studies too, family conditions dominate as explanatory factors. Examples of factors significantly associated with "pre-delinquent" behavior in early childhood are family stress, broken homes, family discipline and supervision once socioeconomic status or income have been controlled for (Chapter 4). Such family factors interacting with socioeconomic status, poverty, housing conditions and physical health are involved in all causal explanations for later delinquency (Willie, 1967).

Taken together, the correlational evidence summarized above points up the importance of families in the physical, social and cognitive development of young children. Subject to the following qualifications, one can confidently attribute a significant portion of the differences in the development of young children to differences in their families. Attempts to moderate or eliminate these differences might well involve working with families.

1) Correlational studies only show association. While they may suggest causal inferences, they do not demonstrate their correctness. For example, it may be that while low family socioeconomic status and low child IQ vary together, low socioeconomic status is not a simple, major cause of low child IQ. Quite probably there is a complex interaction of cause and effect of these two variables and even more complex interactions with third variables such as social-discrimination and ethnic learning patterns. There is some doubt as well about the statistical and real significance of the interaction of family characteristics and perinatal stress. The Birch and Gussow (1970) conclusions arguing for the existence of interaction are not clearly supported by all the evidence they cite nor by other evidence presented in Chapter 4.

2) Programs which do not consciously focus on family intervention for the sake of child development may have more dramatic effects on

family traits and family functioning than those that do. Strategies of re-distributing income, equalizing political power, providing equal access to legal services or fostering integration might be far more potent in changing families and hence children than the more child-directed strategies suggested in this recommendation such as social service referral or cognitive stimulation training of mothers.

3) Many family characteristics thought to be disadvantageous to children are adaptive responses by families to failure, rejection, powerlessness and economic deprivation (Gans, 1962; H. Lewis, 1967; Liebow, 1967). Thus it might be futile and possibly dangerous to encourage families to change without changing the circumstances to which family behavior has rationally adapted. As Rainwater (1969) observes: "Lower-class people will have no incentive to change their culture (indeed they would suffer if they tried) unless there is some significant change in their situation...Thus change can only come about through a change in the social and ecological situation to which lower-class people must adapt" (pp. 250-251).

In short, it may well be that no policy directed at children, even one that actively involves the family, will be adequate without simultaneous moves which strengthen families in other realms of social policy. But in the important realm of child development policy, working with the family should be a guiding principle in planning and program development.

## Strategies and Specific Recommendations

The remaining sections of this recommendation set forth strategies derived from the principle of "work with the family" in its three meanings. They are based on evidence and testimony about their effectiveness which are summarized for each. In order to keep the recommendation section of manageable size, many of the details of the studies are not repeated. However, references to Part I and II sections are included so that the interested reader may refer back for more complete analysis. (Detailed discussions and explanations can be found primarily in Chapter 10.)

Each strategy proposal will be treated as follows:

1) The strategy and its effects: short descriptions of the strategy together with an assessment of intended effects on families and children. The assessment is based on a complex judgment of the evidence and testimony concerning (a) the probability of success, (b) the magnitude of change (how big a change would occur on a measure of intended effect) and (c) criticalness of change (how important would such a change be to the life chances of the child).

2) Evidence and testimony: Summaries and references to findings discussed in Parts I and II.

3) Programs: a list of federally funded programs which embody this strategy in whole or in part. Program numbers refer to Appendix IIIB. In most cases only operational programs and not programs for research and development are listed.

4) Specific recommendations: A specific recommendation is based on one or more items of evidence and testimony already summarized.

## A. Social Service Referral

Social service referral, usually done by private family agencies or public welfare agencies, helps families to obtain financial aid and social resources. The referral agent, not necessarily a professional, plugs the family into community resources like schools, preschools, day care, housing agencies, training programs, employment opportunities, health and family planning services, homemaker services, surplus food or food stamp programs and income supports (Chapter 10).

The intended effect is to improve the functioning of the family in diverse areas such as family unity (marital, parent-child, among children, solidarity), care and training of children, social activities, fiscal practices, household management, health conditions, and relationship to community. The probability of success is high but the magnitude of change is small. That is, most changes which occur are not great although statistically significantly better than controls. Changes which do occur can be quite crucial to the child's life chances.

Evidence and testimony.

Evidence:

1. A series of social casework interventions with measured effects on the St. Paul Scale of Family Functioning using an experimental design show statistically significant improvement in overall "family functioning" as defined by the instrument. The greatest changes were found in health practices, household management and child care. Other changes occurred in family relationship to caseworker and use of community resources. Changes were generally small in magnitude although statistically significant. Changes which do occur in matters of health practices and child care can be vital to the child's future; those in community resources utilization and relationship to social worker are less critical. (Chapter 10, Behling, 1961; Bell and Wilder, 1969; Geismar, 1971; Geismar and Krisberg, 1967; Geismar et al., 1970; Kuhl, 1969; Mullen et al., 1970; Schwartz and Sample, 1967; R. Wilson, 1967.)

Testimony:

2. Survey data and anecdotal accounts indicate that many poor people are unaware of services available and that the usual means of delivering such information via printed material, parent education or media do not lead to increased use of services.

3. Within social work interventions examined, the more successful programs in social service referral operated where considerable community resources were available and depended on the responsiveness of the community social welfare institutions to the needs of the poor (Geismar et al., 1970; Geismar, 1971).

4. Professional degrees in social work usually have little relevance to social service referral. Most social work education is geared toward helping middle-class families with psychological problems through therapeutic techniques (Pearlman, 1968).

5. While social service referral personnel require training, there is no evidence that professional social workers whose education is typically geared toward psychotherapy get superior results when doing social service referral (Brown, 1968; Geismar, 1971).

Programs.[8]

31-2. Child Welfare Services--SRS
31-3. Social Services, AB--SRS
33-1. Social Services, AFDC--SRS
36-2. Public Assistance Demonstration Projects--SRS

Comprehensive programs.

9-1. Head Start (including Parent-Child Centers)--OCD
9-2. Follow-Through--OE
41-3. Community Action Program--OEO
54-1. Model Cities--HUD

Specific recommendations.

--Require that social service programs emphasize referral services.

--Do not fund referral programs in areas which lack available social services, for example, in isolated rural areas.

---

[8] These numbers correspond to those used in the program list, Appendix IIIB.

--Modify professional social work credential requirements providing alternative competence-based criteria.

--Fund training programs in social service referral.

## B. Parent Training for the Cognitive Stimulation of their Children

Training parents for the cognitive stimulation of their children involves teaching mothers certain behaviors which are believed to enhance the cognitive development of children from age six months on. They include labeling and classification, encouragement of verbalization, use of positive reinforcement in teaching-learning situations and so on (Chapter 10).

The intended effect is to increase the measured intelligence of the child, ensure his readiness for public school and enhance his achievement once in school. The evidence and testimony indicate that the probability of statistically and educationally significant IQ gains from such programs is high; the magnitude of change in measured IQ and readiness score is moderate to considerable; IQ gains, for example, are between 1/2-1 standard deviation and sometimes higher. However, one may question the importance of such changes unless there is follow-up after treatment. Without follow-up, the gains are at most moderate.

*Evidence and testimony.*

Evidence:

1. (a) University-based research and demonstration projects using a relatively small number of children show considerable to high immediate IQ gains which are statistically significantly greater than the gains of comparison groups. However, the comparison and experimental children are usually not randomly assigned and attrition in some projects is considerable. The gains made by the experimental children attenuate after treatment ends but, in many cases, persist.

   (b) While parent training as defined above has been tried out mostly with parents of preschool age children, there is some unreplicated evidence that well-done elementary school age projects emphasizing training parents in teaching and reinforcing important reading skills also leads to significant gains by their children on reading achievement tests.

   (c) Trained paraprofessionals get as good results as trained professional teachers and social workers.

   (d) Effects of parent training focused to helped one child, filter down to younger siblings.

(Chapter 10. Barbrack & Horton, 1970; Gilmer et al., 1970; Gordon, 1969; Karnes et al., 1969a, 1969b; Karnes et al., 1970; Levenstein, 1970, 1971a, 1971b; Schaefer and Aaronson, 1972; Wargo et al., 1971, pp. 265-268.)

Testimony:

2. Correlational studies suggest that mother-child interaction patterns, especially verbal teaching style and reinforcement behavior, have effects on children's cognitive development. Some mother-child interaction behaviors correlate more highly with child IQ than social class, income, or physical living conditions (Table 2.4; Chapter 4; Dowe, 1963; Hess, et al., 1968).

3. Given what we know today, there seems to be no critical age for intervention if the child is not severely retarded or perceptually handicapped. For the severely retarded and perceptually handicapped child, we recommend combined preschool and parent training from as early as six months. For children not falling into these categories there is no current evidence that parent training intervention before age three has more lasting or superior effects on the child than intervention begun later (Kirk, 1969; Stearns, 1971; Weikart, 1967; and Chapter 8).

4. No accurate, replicated and valid screening procedures for retardation exist which efficiently distinguish between non-retarded and mildly-retarded children before age four or five (Chapters 4 and 5). Even if accurate screening existed for young children we would have to weight the possibly beneficial effect of very early (before the age of four or five) intervention against the negative effect of falsely labeling a child "low IQ" or "retarded".

5. One of the most compelling justifications for intervention through parent training before school age is to prevent early tracking of children who test as mildly retarded when they first enter school. Such children are often placed in costly and socially and perhaps educationally harmful special education classes (Weikart, 1971).

6. For those children who test as mildly retarded in screening at age four or five and who truly are retarded (i.e., slow learners), parent training would provide parents of these children with a most efficient and effective teaching method of carefully sequenced behaviorally specified tasks. The tasks would start at the child's cognitive level; extensive practice and reinforcement would become an integral part of the parent's teaching behavior. Thus, the slow learning child would not continue to fall progressively

below age level by the time of school entry. Once in school, the parent would continue to provide extra practice and reinforcement in school-related tasks.

For those children who test as mildly retarded in screening but who are not truly slow learners, there may be benefits of parent training apart from the extra practice in cognitive tasks. Such children should then test at age or grade level on IQ or achievement tests once in school and their need for treatment will end provided they enter a well-run primary school program.

For some children, one or two years of treatment together with a well-run primary school program, would be sufficient. For others, continued parent training to reinforce school learning is necessary.

7. Parent training in the cognitive stimulation of their children is cheaper than preschools or developmental day care if only cognitive gains are considered (Barbrack and Horton, 1970; Gray, 1970; Levenstein, 1971a, 1971b).

Programs.

18-2. Experimental and Special Training Projects in Mental Health--NIMH
2-1. Mental Health Research Grants--NIMH
12-3. Special Projects for Health Care of Children and Youth--HSMHA
16-1. Maternal and Child Health Training--HSMHA
17-1. Rehabilitation Service Projects for Developmentally Disabled--SRS
18-1. Mental Retardation, University-Affiliated Facilities--SRS
19-1. Staffing of Community Mental Health Centers--NIMH
19-2. Mental Health Continuing Education--NIMH
34-2. Rehabilitation Research and Training Centers--SRS
35-1. Rehabilitation Research and Development Grants--SRS
40-2. Handicapped Research and Development--OE
37-1. Handicapped Preschool and School Program--OE
Child Development--OCD
Research and Development--OCD

Comprehensive programs:

9-1. Head Start and Parent Child Centers, Home Start--OCD
9-2. Follow Through--OE
27-1. Educationally Deprived Children, LEA--OE
41-3. Community Action Program--OEO
54-1. Model Cities--HUD

Specific recommendations.

--Fund parent cognitive stimulation programs for children with perceptual handicap and other serious learning problems as early as possible, beginning at age six months.

--For other children without severe handicap or severe retardation, there seems to be no critical age. However, if screening is used at age four, parents of children who score as mildly retarded should be offered and encouraged to take advantage of parent cognitive stimulation programs. If screening is not used then there is no particularly desirable eligibility criterion in the evidence.

--Fund voluntary training programs for parents in cognitive stimulation of their children. This would be useful not only for their own children but also for developmental day care, preschools, or elementary schools where parents might be employed.

--Parent cognitive stimulation can be either home-based or combined with center programs. Center programs are usually more expensive but do serve other purposes.

## C. Employ Parents as Teachers of Small Groups in Day Care, Preschools and Elementary Schools

Parents are first trained in cognitive stimulation techniques. They are then taught how to manage small groups of children in structured cognitive stimulation teaching.

Four intended effects might emanate from such a strategy: (1) Increased total family income, for the family of the paraprofessional parent. Often the change in income will be considerable, and such a change will have a moderate effect on the chances of children in that family. (2) Enhanced self-concept of the paraprofessional parent. The probability of successfully inducing such an effect is moderate, as are the magnitude of such change and the possible effect on the future of the child whose parent's self-concept has increased. (3) Greater parental interest by the paraprofessional in her own child's school achievement. This is very likely; the magnitude of such change is apt to be moderate as will be the criticalness of change to the child. (4) Enhanced cognitive and affective development of the children instructed, and of the children of the paraprofessional, is highly likely to occur. Such changes may be of moderate to considerable magnitude, but it will probably result only in a moderately large effect on the child's life chances.

Evidence and testimony. Much of the evidence and testimony on which we have judged the probability of success, magnitude and criticalness of change in producing intended effects is the same as for the previous strategy. The intended effect of increased family income seems valid and need not be justified. Thus, the following will focus on the remaining intended effects--enhanced self-concept, greater parental interest, and the effects of parent teaching of small groups of children in centers.

Evidence:

1. Parents can function effectively as teachers of small groups of children in preschool settings. Trained parents get results on cognitive tests as good as trained professional teachers (Chapter 8; Bereiter, 1970; Karnes, 1972?).

2. Klaus and Gray (1968) and Gordon (1969) measured self-concept and other affective characteristics of mothers involved in paraprofessional teaching programs in preschools. They found that such parents showed the greatest gains in self-concept and sense of inner-control.

Testimony:

3. Survey data from Parent-Child Centers (Kirschner Associates Inc., 1970b; Center for Community Research, 1972) and from other experimental interventions using parents as teachers suggest that parents involved as employees self-report gains in personal appearance, self-concept, and interest in their own child's achievement. These self-reports are confirmed by project directors and consultants. Likewise, staff personnel report that children of parents employed in Head Start, Parent-Child Centers and similar programs are more friendly, outgoing and confident (e.g., Drescher, 1968). One can question the validity of the testimony since parent employees and, hence, their children are a select group of the target population who may have started out ahead in achievement, self-concept and sense of inner-control.

Programs.

8-1. State Institutional Training Service, Day Care--DOL
18-2. Experimental and Special Training Projects in Mental Health--NIMH
46-1. Educational Personnel Training, COP--OE

Comprehensive programs:

9-1. Head Start and Parent Child Centers--OCD
9-2. Follow Through--OE
27-1. Educationally Deprived Children, LEA--OE
41-3. Community Action Program--OEO
54-1. Model Cities--HUD

Specific recommendations.

--Fund training of parents in cognitive stimulation of children and in small group instruction if developmental day care or preschools are funded.

--Fund training of parents in cognitive stimulation of children and in small group instruction for elementary school teaching.

--Require employment of parents in programs involved in teaching in day care, preschools and Follow Through or Title I, ESEA, and elementary schools.

--Through dissemination of information and technical assistance services, encourage public primary schools to employ paraprofessional parents in teaching small groups.

--Deemphasize professional credential requirements beyond the successful completion of an appropriate training program for such paraprofessional teachers.

## D. Involve Parents In Decision Making in Child Development Projects

In federally-funded child development programs, many important decisions are necessarily left to be made at the local level. Examples are: precise eligibility requirements; acceptance of families and children into the project; hiring and firing of project personnel; details of implementing project strategy; finances; allocating of funds; planning for the future; and modification of project components and goal emphases. Parents should be involved formally and informally in the making of these policy and administrative decisions. In some cases they can be formal members of governing boards. In other cases they can act as advisors to the project director and his board. In most cases, they should act as paid and volunteer observers and participants in day-to-day affairs.

The intended effects of parent involvement in decision making are improved diagnostic capability of the project and on enhanced sense of power and competence in the parents, which is believed in turn to induce a greater sense of power and "effectance" in children of the employed parent and in children of parents not employed in the project.

This strategy is different from other strategies we have discussed here, because there is no evidence from controlled intervention studies by which we can judge the proposal in terms of probability of success and other effect factors. But the testimony is strong and convincing.

Evidence and testimony. There is no evidence to be found in demonstration projects or in evaluations of social action programs comparing the effects and benefits of various kinds and degrees of parent involvement with effects and benefits of strategies which ignore parent involvement. Many successful projects in elementary education and preschools do have some kind of parent involvement. Good reliable measures of intensity of involvement are lacking. It is also impossible to separate out the independent effect of parent involvement from the major treatment strategy. For example, if a successful Title I project has a structured diagnostic clinic together with parent involvement, there is no way to apportion part of the success to the diagnostic clinic component and part to the parent involvement. For further discussion with reference to Title I projects see McLaughlin, 1971.

Testimony:

1. Observers of intervention programs like Head Start, Follow Through and Parent-Child Centers agree that parent involvement in decision making (where it exists) has improved individual projects by identifying areas of greatest need and hence improving diagnostic capability of projects; by developing community enthusiasm and support; by recruiting personnel; and by making vital suggestions about the implementation of project strategies and the choice of relevant curriculum materials (Kirschner Associates, Inc., 1970b; Center for Community Research, 1972; Ora, 1972).

2. Sociological findings about differences in perceived needs and in styles of behavior and language--between lower and middle social class groups and among ethnic groups--reinforce the observations of consultants and project personnel that parents (coming from the same social class/ethnic group as the target population of children) can provide valuable contributions toward project success (see also the Diversify Education recommendations).

3. Projects with parent involvement in decision-making seem to lead to an enhanced sense of parent power which has had a positive effect on children of parents involved in the project as well as on other children enrolled in the project. On the other hand, there have been serious conflicts between parents and project staff and among parents themselves which have hampered short-run efficiency (e.g., see Gordon, 1969).

4. Poor or minority-group parents increasingly demand meaningful participation in planning and administration of projects for their children as a pre-condition for participation and for the establishment of such projects in their communities.

5. It is claimed that at least part of the failure for successful and meaningful parent involvement in most projects has been the lack of special training, technical expertise and

legal knowledge which would equip parent groups with needed competence in administration, supervision and policy making.

Programs. In this strategy would be included all programs in child development as well as those closely related, like the Elementary and Secondary Education Act.

Specific recommendations.

--Parents of target-group children should be heavily involved in the initial planning of projects in child development.

--Parents of target-group children should be continuously involved in the administration of projects as advisory board members and as voting members of governing boards.

--Child development programs should require the employment of parents in various capacities, notably as aides and paraprofessionals. This will ensure parent presence at the point where children come in contact with other project staff.

--Various types of technical and legal assistance should be provided to the parent component of governing and advisory boards. Training programs in administrative and budgeting skills should be included in the funding of local projects. Low-income parents should be paid for the time spent in training and in working for the project as advisory and governing board members.

--These recommendations refer specifically to parents of target group children. In many cases it will also be desirable to have input from community members other than parents. A clear distinction, however, should be maintained between community and parent members. This recommendation speaks to the latter (i.e., parent) component.

## E. Family Therapy, Counseling and Therapeutic Social Casework

These strategies usually involve a professional therapist treating a client or clients defined by their family membership. The professional may be a psychiatrist, psychologist, guidance counselor or caseworker. The emphasis of therapy is the probing of underlying emotional malfunctioning of the family which has led to inadequate or disturbed child functioning. Excluded from this strategy are behavior therapies and group therapy with non-family members (see Chapter 10).

It is intended that such therapy, counseling or casework improve family stability and functioning and, thus, indirectly enhance the socio-emotional development of the child. A review of the evidence and testimony leads us to conclude that such programs have only a small chance of success. When successful, the magnitude of change in the family is generally moderate, and the criticalness of change for the child on the whole is only moderate. This does not mean, of course, that some families and children will not profit. Rather, it reflects a judgment that the major causes of family and child instability among the "disadvantaged" do not lie in socio-emotional dynamics but rather can be found in inequitable economic, political and social conditions.

Evidence and testimony.

Evidence:

1. Evidence for improved family stability and functioning after therapeutic casework on "multi-problem families" is largely negative (Minuchin et al., 1967; Pavenstedt, 1967; Brown, 1968).

2. Evidence is generally negative concerning the effects of psychotherapeutic encounters for adults (Eysenck, 1952; Strupp and Bergin, 1969). Family therapy as such has rarely been evaluated with control groups and follow-up. But since many of the ideas informing such therapies have their roots in various kinds of psychotherapies, it is questionable whether family therapy will be more efficacious than individual therapy.

3. Evidence from counseling where control groups have been used is likewise negative or inconclusive (Powers and Witmer, 1951; McCord et al., 1959; Meyer, Borgotta and Jones, 1965). Reviews of the literature on counseling show inconclusive results of treatment (Steffle and Matheny, 1969).

4. There is some evidence in the literature on psychotherapy that therapist personality is more crucial to successful outcome than therapist training (Truax and Carkhuff, 1967; Strupp and Bergin, 1969; Goldstein, 1969).

Testimony:

5. There are numerous claims to success for family therapies and counseling in the literature. However controls are almost never used; most of the claims are based on theory or individual case study. Instruments used to determine success are not standardized or reliable and hence subject to biases.

6. The literature on therapeutic casework strategies is similar to that of family therapy and counseling. In addition, most therapeutic casework is being practiced

on white middle-class families. It is questionable whether the same techniques would work as claimed on culturally or ethnically different populations.

7. Claims are made that poor and ethnic-group members make more effective counselors and therapists for low-income or ethnic-minority target groups because they can identify and establish better rapport with their clients. Counter-arguments are advanced that trained paraprofessional therapists and counselors behave like their middle-class professional trainers (Goldstein, 1969; Riessman, 1964).

Programs.

13-1. Family Planning, Community Action Programs--OEO
18-2. Experimental and Special Training Projects in Mental Health--NIMH
31-2. Child Welfare Services--SRS
33-1. Social Services, AFDC--SRS
33-2. Indian Child Welfare Services--BIA
42-3. Migrant Assistance, Community Action Programs--OEO

Comprehensive programs:

1-1. Child Care Services--SRS
9-1. Head Start and Parent Child Centers--OCD
9-2. Follow Through--OE
41-3. Community Action Programs--OEO
54-1. Model Cities--HUD

Specific recommendations. (See also recommendations under Social Service referral.)

--Do not fund major programs relying on therapy, counseling or therapy-oriented casework in child welfare or social service rehabilitation for families receiving public assistance under AFDC.

--Do not fund training of professionals for therapeutic social casework practice.

--Deemphasize professional credential requirements for those therapy and counseling programs which have not been eliminated. Substitute training requirements and certification of competence based on behavioral assessment.

## F. Parent Education

Parent education for child development is designed to impart knowledge to parents so as to improve the physical, emotional, social and economic life of the family, emphasizing outcomes for children. It has traditionally been pursued through lecture and discussion; by pamphlets and books; by counseling; and, more recently, by television.

The intended effects are increased parent knowledge about childrearing and home management. New knowledge is assumed to lead to improved attitudes which in turn are reflected in improved parent behavior in child care and home management. (We do not deal with health education or education for family planning in this context; see the Health section of this chapter.)

The general picture of evidence and testimony makes it difficult to judge the validity of the assumptions about intended effects. There is considerable testimony in favor of parent education from parent educators, but little support from other less-biased sources. The little valid evidence that does exist together with our assessment of the credibility of testimony leads to the conclusion that the probability of success of parent education in increasing knowledge is moderate; the probability of success in changing attitudes and behavior among parents is quite small, with such changes probably being of little magnitude. We cannot determine the importance of such changes to the child, since no studies encountered have tried to measure differences in child outcome as a result of parent education. It can be assumed that it will be small since not even parent behavior is significantly changed (see Chapter 10).

Evidence and Testimony.

Evidence:

1. Very few parent education projects have been evaluated using control groups and reliable measuring instruments to detect parent or family change. Those few which have been evaluated show some changed parent knowledge and attitude but not changed parent behavior; child outcome is not measured (Chapter 10; Kraft and Chilman, 1966; Brim, 1965; Simulmatics Corp., 1969).

Testimony:

2. Careful, unbiased reviews of the literature are generally gloomy about the prospect of successful parent education for low-income families are so harassed with survival needs that rarely are the parents physically or emotionally able to sustain interest in parent education projects. Attendance rates are low in terms of desired target population; most of those who attend come to less than 1/4 of the meetings. Somewhat better attendance results were found in a project that used television especially when families were paid to watch (Mendelsohn, 1968).

3. On the other hand, Parent-Child Center surveys and Head Start project personnel and consultants often note that

parent education is a popular component albeit with a comparatively small number of parents (Kirschner Associates, Inc., 1970b; Center for Community Research, 1972).

*Programs.*

1-1. Child Care Services, CSA--SRS
7-2. Extension for Family Living, CES--DOA
53-1. Vocational Education, Consumer Education, Homemaking--OE
53-2. Extension Programs, Improved Nutrition--DOA

Comprehensive Programs:

9-1. Head Start and Parent-Child Centers--OCD
9-2. Follow Through--OE
41-3. Community Action Program--OEO
54-1. Model Cities--HUD

*Specific recommendations.*

--Deemphasize operating parent education projects designed to improve parental child rearing and home management behavior. Instead, fund small experimental projects designed to overcome the serious obstacles to effectiveness both of programs and of evaluations.

--Deemphasize professional credential requirements for parent educators that remain funded by federal sources.

## Health Recommendations

Our efforts in Chapters 6 and 11 to analyze child health and child health programs, respectively, illustrated a basic characteristic of this field: the inseparability of problems from the services designed to solve them. Consequently, our recommendations cannot be simple programmatic inferences from a comparison of problems with present programs; instead, they must be basic consideration of the entire child health system, which is interwoven with other aspects of childhood and of health. To propose or understand specific strategies, it is necessary to understand both the present nature of the child health system and the basic nature and potential effects of change in its delivery component. Following a rather extensive discussion of these questions, we make recommendations in four areas: nutrition programs; maternal and infant care programs; post neonatal care; and broad emphases on service delivery. As will be clear in the supporting discussion, the bases for these recommendations are closely interrelated, and they are not independent of each other. Thus, although we make distinctions for the sake of clarity, the reader should bear in mind the systemic and comprehensive nature of this entire final program recommendation section.

### The Context of Health Recommendations

A discussion of health recommendations relevant to child development must be placed in a slightly different context from that of educational and family intervention.

First, the primary goals of virtually all educational programs discussed to this point are developmental. Perhaps it would be more accurate to say that the purposes explicitly stated and evaluated are developmental in nature. This is not the case with health programs, either in general or in relation to children. Most health programs are concerned with alleviating or preventing conditions which, whether or not they have permanent developmental consequences in a cognitive sense, are deemed undesirable--either for the individual or the society--and are considered either curable or ameliorable. As a result, discussions and studies of the developmental implications of various health problems (malnutrition, lack of prenatal care, etc.) tend to be peripheral rather than central to the core of health care literature and research. What literature does exist tends to be less voluminous, more testimonial in nature, less replicated, and more idiosyncratic than the corresponding literature in educational and behavioral science fields.

Second, this trend is reinforced by the greater scientific "hardness" of other health issues, such as the minimal dosage of medication to achieve results, development of simple but reliable tests for diseases and conditions, innovations in surgical techniques or monitoring and life-support technologies. Whether this is bad money driving out the good or not depends on one's values, but the fact remains that developmental issues (except in strict anthropometric or physiological terms) and psycho-social issues in general are not widely accepted as completely proper topics for serious medical research. (For an excellent development of the counter-argument for the necessity of behavioral science, focused directly on children, see Talbot, Kagen, and Eisenberg, 1971, passim and particularly Talbot and Howell, 1971.)

Third, most educational and family intervention situations are focused primarily on children or child-centered issues. That is, experts in the educational field all accept a concern with the child and his development as most proper, if not a priori, even if they disagree about goals or methods. In health, however, pediatrics, child psychiatry, and even public health nursing (a major source of preventive and maternal programs) are specialties within much larger professional domains. Pediatricians, for example, comprise only 5% of the total number of practicing physicians (American Academy of Pediatrics, 1971, p. 20). It is not, therefore, possible to take for granted an uncomplicated dedication to child health in those who will provide it, as it is just one part of their responsibilities.

Fourth, while education at the elementary level (and increasingly at the preschool and day care levels) is overwhelmingly a public function, health care is not. Public health efforts are in general kept quite separate from other health activities and are definitely something of an orphan in the medical professional and status hierarchy. Even today, seventy per cent of all expenditures for child health care services are paid for by private means (out-of-pocket expenses or through insurance plans), while 20% are paid by state and local governments, and only 10% by the federal government (Breslow, 1969, p. 328). There are several important implications of this private, marketplace nature of health care delivery:

a) Governmental leverage is likely to be less than, or at least different from, that in, say, public education.

b) The set of actors and independent variables are often quite different from those in educational programs.

c) The health care "system" is less of a system than the educational one. Except in some categorical programs, there are no state-wide mandates, uniform standards for quality of care or process organization, or reporting requirements. The potential for large scale evaluation studies with even minimally acceptable control groups is thus limited.

d) Finally, the public accountability and visibility of education, which it could be argued is a primary reason for outcome evaluation efforts, is virtually entirely lacking in health care, particularly in so-called "mainstream" care delivery for non-indigent persons.

## Changes in the Health Care Delivery System

The situation described above is not static. In fact, it is in a state of rather turbulent upheaval. The most visible changes being advocated concern the non-public nature of most delivery modes. There are many signs which point to a gradual process of fleshing out the rhetorical slogan of "health care as a right" into a meaningful, viable extension of the public welfare function, just as universal free public education was earlier so established as a legal right. Examples of some of these changes are: (1) the gradual assumption by the Federal government of payment for and sometimes provision of services for groups left unprotected by the private market (Medicare, Medicaid, categorical anti-poverty programs); (2) proposals to subsidize medical schools on a per-pupil or per-graduate basis, thus both increasing the power of medical school administrators to control curriculum and to bring more students from minority groups; (3) proposals more or less approximating a national health insurance system to ease and equalize the growing financial burden of illness on families; and (4) regulatory powers appropriate to such ventures (national peer review mechanisms, state insurance commission activism and advocacy role, payment incentives for prepaid or group practice arrangements).

In addition, there are indications that medicine is gradually moving into closer contact with other disciplines and with health care consumers. If these trends continue, behavioral, psycho-social, cultural, and political correlates and determinants of physical and mental disease would gain greater visibility and professional interest. Furthermore, the health care delivery process should become more publicly accessible and accountable.

None of the changes mentioned above is focused upon the needs or concerns of children. As suggested previously, much of what takes place in the health field is addressed to a much wider clientele. On the other hand, many of these trends clearly will have an impact on what health services for children will be like and what effect those services will have on the health status of children.

There are areas of the health care field in which priority already rests with children. In HEW, top priority for some time has been focused on maternal and infant care, along with family planning programs. One of the most frequently mentioned "staging" strategies for national health insurance is to insure coverage for children equivalent to that provided for the elderly under Medicare, thus making symetrical and equitable the government's protection of the non-productive human resources of the country. For some time, pediatricians have been concerned and active in moving toward establishing national standards for child care and incorporating health into other child programs. The American Academy of Pediatrics, for example, was a consultant for Head Start development and has prepared guidelines for health care in day care facilities, among other activities.

At this time, it is impossible to predict the results of all of this agitation. In particular, we wish to explicitly pose two questions which we have been unable to answer because to do so would require a much broader study of the entire medical care field and its political and social ramifications.

1) Will child development and psycho-social factors remain generally peripheral to the majority of health care goals and practice?

2) To what extent will reforms and revolution in the larger health care delivery system--national health insurance, consumer advocacy and control, new organizational forms such as prepaid group practice--have a greater long run (or even immediate) impact on the health status of children, individually or as a group, than programs specifically designed for (and directed at) children?

We are particularly concerned about the latter question, since it raises the issue of trade-offs between health programs as means to the same ends. While we cannot resolve the issue, we do feel it very important that the recommendations presented here be discussed and "bargained" for not only among other proposals for child development in the child-centered world (education, day care, etc.) but also among broader, more structural proposals for health care delivery reform.

### Health and Child Development

Before proceeding with our specific recommendations, we raise another trade-off issue, that of health programs versus other programs specifically intended for child development. At the present time, there have been no substantive, major studies in this area. In particular, the experience of Head Start or other multi-service programs has not been utilized in such a way as to compare results from health, cognitive stimulation, and social activities. What can be discussed are some of the ways in which health or health care can interact with development and educational achievement, and some areas in which it seems probable that health and child development programs could represent trade-offs. Scientific evidence and logical sense suggest that the processes of physical growth and/or impairment are distinct and separable from processes of cognitive, emotional, and social development only in the formal schemes of professionals in those fields. Some brief, acute childhood diseases or traumas (chickenpox, minor colds, broken arms) may be generally considered as isolated medical events with no lasting implications. However, for many children contact with the medical care system, with the sick role, or especially with even brief hospitalization in early childhood can have significant and often permanent effects on behavior, attitudes, and later illness patterns and response (Bergman, 1965; Dimock, 1960; Spitz, 1946; Schaeffer, 1959; additional bibliography in Shore, 1967).

Other evidence, synthesized by Birch and Gussow (1970), among others, strongly suggests that physical health is a critical independent variable underlying educational performance and even intellectual development. This evidence has been presented in Chapter 6 and will not be repeated here. Assessment of biological risk, illness history, and current health status in groups of children under study for evaluation of schooling or cognitive stimulation programs would seem essential if the results are to be meaningful. And yet this is virtually never done, and the implications for rather gross false negative findings in education research appear startling.

> Children who had been repeatedly and excessively exposed to biological risk, both before and after birth, were unlikely to be dramatically helped solely by the application of "more schooling," no matter how early it was begun or how intensively it was pursued. (Birch & Gussow, 1970, p. 264)

Birch and Gussow go on to point out that the physiological and developmental impact of sub-optimal health or conditions of life cannot be wiped out in a short period of time, and thus evaluations may be further upset if they seek to draw conclusions about intervention programs after a year or even a few years. For example, the substantial evidence that the health and physical condition of the mother is one of the greatest risk factors for the infant indicates that one must wait until the next generation at least (and probably longer) to see the ultimate developmental or learning effects of improved health status.

In most educational or social work settings, physical illness or handicap is only taken into account when it becomes grossly manifest, and even then with a lack of understanding of its full consequences. For example, children with infectious diseases are kept out of school to prevent contagion and other children are urged to get inoculations; children with severe perceptual problems, physical handicaps, or mental retardation are generally perceived to need special programs. But policy is not oriented, as a general rule, toward using schools as tools to attenuate the spread of non-infectious but clustering diseases such as sickle cell anemia, undernutrition, rat bites, and so forth; nor does it view health as a continuum along which sub-optimal conditions (mild retardation, hunger, aches and pains, minor perceptual disorders) may be marginally affecting the performance of many disadvantaged children.

Our concern, however, goes further than merely recommending that researchers combine educational, biological, genetic, and medical factors in analyzing patterns of child development and performance. The evidence, however fragmentary, leads one to the probability that biological risks, unfavorable environments and poor health are not random occurrences in our society but rather tend to pervade certain groups in such a way as to create widespread and rather massive differences in development. Finding and analyzing such a framework would seem to be vital in eventually settling current debate over genetic potential as a causal factor in achievement differentials.

> Thus although it is entirely reasonable to wish to know more about the heritability of intelligence and learning capability in human beings, the pre-condition for a serious consideration of this question is the equalization of the developmental environments of those whose genetic make-up we wish to compare. (Birch and Gussow, 1970, p. 266)

For example, comparisons in which current family income or social clues are used as control variables, thus apparently equalizing environment, are simply not valid unless the past health and nutritional history of those groups were also roughly comparable. And even a brief look at national income figures will show that very few black or other non-white children live in families who have been out of poverty for as long as their middle class peers.

We now return to the specific question of possible trade-offs between health programs and other child development activities.

The area in which there is the strongest evidence of a trade-off effect is that of early screening and treatment for handicapping and chronic conditions. The Joint Commission on Mental Health of Children (1970) estimated that comprehensive care until the age of three could reduce chronic handicapping conditions by 20 to 30 per cent. These conditions, if not remedied, generally require special educational and/or physical rehabilitation services which are usually quite expensive and therefore difficult to provide for all children in need. An HEW Maternal and Child Health Program Analysis (1966) reached similar conclusions, placing stress not only on detection and treatment but also on preventive measures such as prenatal care and family planning. There is also evidence, summarized in the preschool recommendations in Chapter 12, that early treatment in a setting combining health and education will reduce the level of handicap or lower achievement patterns of handicapped or retarded children. One could carry the cost-benefit argument even further by calculating the potential earning capacity of a child whose mild retardation is observed early enough for him to become an independent, working individual, rather than a school failure and perhaps eventually a resident of an institution for the retarded.

The whole notion of preventive health measures, which are becoming very popular, is that of a trade-off. Such programs as rubella inoculations for children, genetic counseling and testing of parents and fetus, family planning, and abortion services may--at reasonably low cost--reduce the number of neglected, abused or handicapped children who would otherwise require special medical, educational, and probably family support services.

## Recommendations

From this general introductory discussion of the relationship of health to child development and the problems associated with policy decisions, we move to a set of recommendations for child health programs related to the general child development strategies which are developed in this report. In developing these recommendations, we worked from the following questions which we judged most immediate:

1) To what extent can and should health services be integrated into or coordinated with other child development strategies such as education, day care, preschools, parent training, and so on? Are there particular combinations or structural arrangements which appear most effective or efficient?

2) What specific areas of health intervention have known or suspected impacts on child development or on those critical health needs of children discussed in Chapter 6? Can we assign some priorities in choosing among health strategies which might serve or influence young children? What groups of children should receive priority?

3) What broader aspects of health delivery policy have particular impact on the health of children and on the implementation of our other recommendations? Areas which seemed of probable importance were:

   --financing
   --diversification of manpower
   --consumer/community involvement
   --comprehensive, prepaid delivery systems.

Consideration of these questions has led to the following recommendations:

1) Nutritional programs should be redesigned, expanded, and given greater priority as a preventive health strategy for children.

2) Maternal and infant care projects and family planning programs should be expanded to cover more of the high risk populations; these programs should remain (as they are at present) separate, categorical programs for the immediate future.

3) Other health efforts for children should be incorporated into one of two more comprehensive settings:

   --comprehensive, family-oriented health delivery systems, such as Family Health Centers

   --multi-service programs for children, such as Head Start, schools, or Parent-Child Centers.

4) Broad emphases in a child health strategy should be diversification of pediatric manpower (along with general

expansion of allied and community health personnel); improvement in financial support for child health services; and improvement in general environmental conditions for children.

1. Nutritional programs should be redesigned, expanded, and given greater priority as a preventive health strategy for children.

*Discussion of rationale*. The issues of manutrition, subclinical malnutrition, or just plain hunger are an excellent example of the inequities which can result from the lack of appropriate diagnostic tools and outcome measures. The eloquent testimony of the Citizen's Inquiry (*Hunger, USA*, 1968); of those who work with Indians, migrant workers, or the rural poor; or of teachers and community action workers in inner city slums continues to pale in the public eye before the scientific bluntness of such common statements as "There is little evidence of clinical malnutrition among children (or adults) in the United States" or "The permanent effects of malnutrition are not demonstrated". What, for example, is one to make of the evidence that rather alarming rates of anemia in very young children decline dramatically across class or race lines in later childhood? (*Profiles of Children*, 1970; Gutelius, 1969; Woolsey, 1971)

We are obligated first, therefore, to point out the limitations of the existing data and analysis. Reliable tests for subclinical malnutrition, as well as general agreement on optimal nutritional requirements or components, are not available. (The term "subclinical" itself indicates that the cutting point for diagnosis is not necessarily in terms of human growth needs but in terms of the ability of clinicians to detect such needs.)

What evidence and testimony concerning malnutrition does exist indicates that certain distinct groups of children are at extremely high risk (i.e., incidence rates of anemia, parasites, low levels of nutrients, caloric intake, etc.). Intervention directed at these situations could be expected to be of greater impact and cost-effectiveness than untargeted programs or models which use national figures as their data base for calculations and planning.

The absence of longitudinal studies of the results of early childhood nutritional deficits, at other than extreme levels, make it premature to assume that no damage has been done during the early years if nutrition or specific nutritional measures (such as anemia) later spontaneously improve.

The purposes of a nutrition program can first be considered at the level of the social needs, defined broadly, which it might affect. These needs include health, education, alleviation of poverty (i.e., lowering the cost of foods as a form of supplemental income), crime and delinquency control (i.e., reducing stresses leading to antisocial behavior, directly or via schools and poverty effects), and pleasure (Young, 1971). Nutrition programs are one set of possible alternatives for achieving goals in these areas. Since nutritional problems can be approached several ways, there are then a variety of program options which might be differentially successful in meeting these goals. Such program options include

--school meal programs (including Head Start, preschools, and day care centers);

--nutrition education, for children and parents;

--institutional feeding of other kinds (on maternity and pediatric wards, in foster care facilities, residential facilities for the mentally retarded, mentally ill, juvenile detention centers, etc.);

--nutrition services within health programs (e.g., Maternal and Infant Care, Children and Youth, Parent-Child centers, outpatient departments;

--food stamps;

--direct distribution of foodstuffs (surplus commodities);

--fortification of foods eaten by high-risk groups;

--technical assistance and equipment provision (kitchens for schools or regional food preparation and distribution units, nutritional education curricula, etc.).

In this report, we are not able to fully study the implications of all of these options, nor are we able to discuss the complete range of possible combinations of specific programs and specific social goals. The data do not exist to make fine distinctions between the cost-effectiveness of many programs (Young, 1971, has done a nice analysis of the School Lunch Program in terms of internal program options, but does not test it against other strategies such as food stamps for parents). However, greater depth could be achieved, and this should be the task of a group specifically looking at nutritional issues. This is not to say, however, that we believe the question should be delayed for another round of studies. Rather our approach to the fact of incomplete data and a possibility of justifying nutritional programs across a wide range of social goals is much the same as that adopted by Young:

> The present state of knowledge does not permit establishing quantitative functional relationship between nutrition and the achievement of outputs in health, education, and other important areas. Thus, for purposes of a preliminary analysis at least, it is expedient to assume that nutritional deficiencies (failure of people to consume required quantities of essential nutrients) are harmful _per se_, and that a sufficient objective is to attempt to eliminate these deficiencies (Young, 1971, pp. 8-9).

We would differ with Young only in saying that it is more than expedient to make such an assumption. It is equitable and just to make such an assumption, since the majority of Americans, who are well-fed, do not need to justify their consumption of food on grounds other than that it is better to eat than to go hungry.

The following analysis and broad strategy suggestions for this recommendation reflect this concern that movement begin in the area of nutrition under the primary justification or rationale of eliminating the inherent inequity and unconscionable extent of hunger in an affluent country, many of whose citizens are so well fed that they are now suffering the effects of nutritional surfeit (high cholesterol, overweight, etc.).

Intended effects of recommendation.

1) Increase effectiveness and appropriateness of federal nutrition programs as health programs.

2) Improve effectiveness potential of child development and health programs through incorporation of nutritional components (direct provision of meals, nutrition services, and nutrition education, with stress on direct service).

3) Remove administrative complexity and existing inequities in coverage by extending National School Lunch Program (NSLP) to all schools and by providing meals free to all poor children (Young, 1971).

4) Alleviate most severe malnutrition (clinical and subclinical) by targeting intensive programs at high-risk groups of children (American Indians, Eskimos, migrant workers, blacks, poor) with an expected impact on the incidence and severity of perinatal complications (low maternal weight gain; poor maternal health, anemia; minimal brain damage in child), of infectious and parasitic diseases, and of school performance problems (inattention, apathy, poor attendance).

Evidence and testimony.

1) The present location of administrative authority for most nutrition programs in the Department of Agriculture militates against close coordination with HEW efforts and also confuses human welfare with price support or surplus distribution purposes (Segal, 1970).

2) The Health and Nutrition Examination Survey (HANES) now being undertaken by the National Center for Health Statistics (due to report preliminary findings in December, 1972) should generate valuable baseline data both on the nutritional status of the population and on the impact that federal programs are having on that status.

Participation in such programs will be studied; comparisons of nutritional status between participants and non-participants will be possible. These data will hopefully provide more analytically sound directions for Federal nutrition policy, although, since they are based on the effects of the current fragmented system, they will still not provide much evidence supporting a shift of nutrition and food supplementation programs to HEW or into more comprehensive programs. Although we have not examined the methodological procedures of the study and the following may be a ~~moot~~ point because of better design, we do raise the caveat about surveys made by Birch and Gussow:

> It would appear, then, that the really poor children, like their pregnant mothers, are not included in nutrition studies or "national samples" because they are not seen by doctors, because their families move about, or because their mothers either do not supply reliable data or do not return questionnaires at all. (Birch and Gussow, 1970, p. 230)

3) Young (1971), using rather simplified but comprehensive models to analyze NSLP in the general context of national child nutritional needs--i.e., the extent to which NSLP supplies total child-RDA days (RDA is the Recommended Dietary Allowance, as set by the Food and Nutrition Board of the National Research Council, National Academy of Science)--concluded that: "In terms of output per dollar it appears that the most effective program would be one requiring 100 percent participation of all schools and free meals for all poor children" (Young, 1971, p. i). The National Advisory Council on Child Nutrition, in its first annual report, recommended that same thing, presumably drawing on Young's analysis (New York Times, March 8, 1972).

More universal coverage might also reduce the number of children who can be diagnosed as nutritionally deficient (by simple screenings for hematocrit, weight, and height) but who are not caught by usual income eligibility (Paige, 1971a).

4) Fomon (1970), as cited in Woolsey (1971) notes that infants of low birth weight and those born to malnourished mothers are among those more likely to develop iron deficiencies. Low birth weight is associated with low maternal weight gain across socioeconomic class (Werner, Bierman, and French, 1970), but is also correlated with SES directly (see Chapter 6 for fuller documentation). Fomon and Weckworth (1971) report Children and Youth data showing that black children at all ages have lower hemoglobin levels than non-blacks (removing differences explained by sickle cell anemia). Read (1971) found nutritional problems in some Indiana groups as great as those in underdeveloped countries. The testimony and anecdotal evidence gathered by the Citizen's Inquiry into Hunger (Hunger, U.S.A., 1968) is convincing in its face validity if not its epidemiological rigor. All of these pieces of evidence suggest that there are clusters of hunger and malnutrition which could be attacked on a basis of selected groups.

5) There is some evidence that school meal programs can consistently improve the diets of pupils aged ten to 13 (Christakis, 1968); one could expect similar results for younger school-age children also. They also may improve attendance rates and pupil-teacher relations (Garvue et al., 1971). Paige (1971b), studying anthropometric and biochemical (hematocrit) changes in undernourished children given school lunch versus a control group, also undernourished, found no significant improvement. He suggests, however, that the one-third of the RDA represented by lunch is not a sufficient critical mass to overcome deficiencies; the length of the test may have also been too short. Additional evidence and testimony are reviewed by Woolsey (1971) and Elias (1971).

> To regard a Head Start or school lunch program as though it were going to modify the nutritional circumstance of the family is to be self-deluded. The nutritional circumstances of the family can be changed only by a fundamental social modification of food practices, coupled with food availability and understanding by the community. (Birch, 1970, p. 879)

While we share Birch's sense of the ultimate need for broad social reform in order to alter nutritional circumstances, we would only note that part of that long-run improvement begins with each day that a child is better fed in some way than he was before.

Suggested strategies for implementation.

--Transfer, at the least, NSLP and the other child-feeding programs from USDA to HEW (see list in Chapter 11); ideally, Food Stamps and Direct Food Distribution programs should become Joint USDA-HEW efforts.

--Extend the NSLP to cover all schools and all needy children.

--Make similar programs a mandatory part of all Federal ventures in preschool and day care functions.

--Special efforts should be made to provide facilities and technical devices for hot lunches at 100% Federal funding to reduce non-participation due to local financing problems or lack of technical expertise.

--Expand nutritional component of Maternal and Infant Care projects, coupled with the expansion in number and age eligibility (to age two) proposed later in this section. Experiment with offering nutritional services, whether in the form of meals or purchasing arrangements, through these centers to families after they lose eligibility for medical services, as one approach to solving the lack of contact with children aged one to five.

--As a long run goal, seek guaranteed minimum income, or some other form of income supplementation, instead of relying on direct service or food stamp programs (Segal, 1970). In particular, even in the short run, do not invest in attempts to beef up the nutritional value of food for poor people, to create special supplement foods, etc. Such programs perpetrate poor/nonpoor inequities and stigmata and are appropriate only in underdeveloped countries when massive levels of malnutrition coexist with greatly disparate SES patterns. Efforts to improve the quality and nutritional content of foods should be done with the purpose of providing a better and healthier diet for *all* people; we are in no way downplaying that policy, although it is not part of our recommendations.

Because of the lack of institutional contact with young children, who need nutritional services, and the inappropriateness of either universal day care or preschools at this time, as argued in Chapter 12, it would appear that the only strategy which will effectively reach large numbers of young children on an efficient basis will be some sort of family oriented plan (such as food stamps or direct distribution) or the more indirect but in many ways more effective route of income redistribution policy.

2. Maternal and Infant Care projects and family planning should be expanded.

*Rationale*. These two programs have very clear relationships to the critical health needs of children which we have described. In a broad sense, they are both preventive programs and thus have a secondary impact of reducing the chances of the cycle so well described by Birch and Gussow (1970, p. 268) of poverty, poor maternal health and nutrition, increased risks and perinatal insults to the fetus and infant leading to illness, malnutrition, and ultimately to elevated risks of school failure, and greater risks of poverty.

There is an expectation that over time these programs, if widely implemented, would sharply attenuate rates of some childhood illness, handicap, and behavior disorders, as well as infant mortality--and thus, as preventive measures, would be alternatives to later special education, compensatory education, and considerable pediatric and adult medical care.

The programs are also relatively inexpensive, serve a relatively well defined population, and present wide opportunities for the use of improved methods of diagnostic testing and non-traditional manpower (nurse midwives, pediatric nurse practitioners, community aides).

The need for these services is great; they should for the present be kept separate so that they do not depend on the success of less popular health proposals for their funding.

Family planning programs should be particularly effective in preventing unwanted births to high risk mothers as a means of reducing birth defects, mental retardation, genetic abnormalities, and maternal and infant mortality.

Family planning programs should also be able to prevent unwanted births to families that do not have the financial means or the desire to care for more children, and help to reduce financial and emotional stresses on families so that children already in the family can be better cared for. It is often argued that family planning will reduce child abuse and neglect, and the mental and physical health risks of poverty.

## Intended effects.

1) Increase the proportion of mothers receiving prenatal care.

2) Reduce the number of premature low birthweight babies and those with other perinatal complications.

3) Reduce possible family stresses (leading to family break-up, abuse, neglect, malnutrition) by reducing the number of unwanted children or children in excess of parents' ability to cope.

4) Extend access to genetic counseling, early pregnancy screening and abortion services, as well as traditional prenatal services.

5) Over the long run, effect changes in the epidemiology of maternal and infant risk by improving the health status (present and past) of the childbearing population.

## Evidence and testimony.

1) We will not rehearse here the substantial evidence and testimony given in Chapter 6 relating prenatal care to improved outcomes of pregnancy or the implications of perinatal complications of unhealthy mothers on the health and development of young children. We refer the reader to Birch and Gussow (1970) as the best overall statement of the arguments, although we do not feel that one has to tie in school failure (for which there is less causal evidence) to argue for the need for prenatal care on its health merits.

2) The evidence in Chapter 6 concerning family planning suggests that many infant deaths and birth defects could be prevented. Premature children are more likely than full term infants to suffer from sensory, neurological and mental defects; they are more likely to do poorly in school and to evidence behavioral problems, particularly if their home environment is poor and non-supportive. Those mothers most likely to suffer birth accidents in pregnancy (infant death or prematurity) are those who have frequent pregnancies, teenagers, women bearing more than four children, and women over thirty-five.

3) There is evidence that children in large families are more likely to suffer from infectious diseases and accidents (Dingle et al., 1964; Meyer et al., 1963). Forssman and Thurve (1966) concluded, from a study of children whose mothers had applied for and been rejected for abortions, that "unwanted" children were more likely to require psychiatric help, to exhibit antisocial or criminal behavior, and to do poorly in school.

4) Seventy-five per cent of all families with four or more children live in poverty (Lowe, 1971, p. 648). While the causal links are not evident, there is certainly the possibility that many of those families would be able to better provide for their children if they had fewer of them; many of the families in fact express agreement.

5) The data presented in Chapter 11 concerning the age-specific health problems of children, plus the qualitative differences in providing medical care to very young children, suggest that extending the age limits on Maternal and Infant Care program an effective screening organization as well.

Suggested strategies.

--Large-scale expansion of the Maternal and Infant Care program, in terms of the number of projects funded, level of funding, stability of funding, the age limits covered. Funding for Maternal and Infant Care should not have a cut-off date which would require community generation of funds until some sort of national health insurance which adequately covers children or some other system of payment guarantee for indigent groups exists. The risks involved in continuing to neglect maternal and early infancy care are much greater than the costs of such programs out of general tax funds.

--Continue to target Maternal and Infant projects on high-risk groups; the record described in Chapter 11 indicates that this objective is not being rigorously pursued. Coverage is particularly critical for teenagers, rural women, migrant workers, and those hard to reach urban poor who avoid program efforts.

--Maternal and infant centers should either gradually extend coverage on a sliding scale basis to non-poor women so that they become less of a "dual system" artifact, or gradually incorporate themselves into comprehensive health care delivery systems which serve both poor and non-poor. We stress the gradualness of this move because there is some evidence that neighborhood health centers, for example, tend not to concentrate on the special health problems of mothers and children (AAP, 1971, p. 108).

--Family planning programs should stress maternal and child health, not population control or the eradication of poverty. They should be offered in conjunction with other health services; if they are offered in a separate situation, they should have wide accessibility to other services.

--Insurance mechanisms and Medicaid should be extended to cover such outpatient services as family planning so their preventive potential can be achieved. These benefits should also be extended to cover abortion services.

3. Other health efforts for children should be incorporated into one of two more comprehensive frameworks:
a) comprehensive, family-centered health care
b) multi-service programs for certain children.

Rationale. For the majority of children over two years of age, health needs, in terms of highly trained personnel, are minimal. Those health needs which they do have are often closely related to their families--e.g., child abuse; infectious diseases; accidents and other environment-related conditions. Furthermore, arguments independent of children's needs stress the need to provide more medical care to families rather than to individuals.

For certain children, however, the health needs of childhood will be very great. Among these children are those with handicaps and chronic conditions who are often either not diagnosed until they reach school (in the case of retardation, perceptual difficulties, even sometimes hearing loss and visual deficit), or if diagnosed early are not helped in any systematic way by social institutions until they reach school or kindergarten. For other children, the health risks of childhood may be particularly high because of their membership in an extremely vulnerable group in which significant differences with their peers will be apparent even at an early age. These children might include children of migrant workers, Indian children, some children of the inner city slums and of the rural poverty areas.

For these two groups of children, there is a need for early screening for and diagnosis of their constellation of problems and for early treatment in the form of multi-service programs, incorporating health, education, cognitive development, socialization, and family support services. These programs should be available at least to some children as early as age two or three, and extend until school or special education programs take over.

To clarify this recommendation and its relation to other recommendations, a brief projection appears useful. If fully implemented, the type of health care arrangements which we would like to see tried for disadvantaged children begin with universal prenatal care and supervised delivery (either by a physician or nurse midwife) for every pregnant woman, who has also had an opportunity to use family planning and abortion services if she so desired. Every attempt is made to diagnose deficits and handicaps at birth or shortly thereafter, with referral to proper treatment. In any case, an extended network of Maternal and Infant Care centers (along with other existing resources for care) provides care for the child until age two, with at least one extensive physical-developmental assessment done during that time.

After age two, most children and their mothers would be referred, where possible, to family-oriented comprehensive care systems. We see two possibilities here. One is that Maternal and Infant Care projects will merge with Children and Youth projects and then extend coverage to other family members. The other is that Children and Youth projects will gradually fade out and the number of Family Health Centers, Neighborhood Health Centers, expanded outpatient departments, prepaid group practices, and the like will increase to meet the need for three-and-over care. What will be available, hopefully, is extended financial access through some sort of national health insurance with spotty coverage by more organized units. We advocate keeping Maternal and Infant Care separate in the interim because we feel that these services are the most vital of any which are delivered to children.

Multi-service programs would operate on a more selective basis than Head Start. They would serve the needs of children with physical, perceptual, or other handicaps to attenuate the permanent stigmatic and handicapping effects of such conditions. (The rationale and specifics of this function are more fully developed in the Chapter 12 Preschool discussion.) They would also serve as a case-finding and service institution for children who had not been involved in the system earlier. In these cases, the medical model for the centers should be one of close connection with some community health care source (a Neighborhood Health Center, a hospital, a group practice).

Intended effects.

1) Provide a reasonable quantity and quality of health care to the greatest number of children--not at the expense of health care for adults--by providing it in comprehensive, organized systems, rather than small, scattered programs.

2) Provide programs more closely fitting the age-specific needs of children.

3) Provide greater diagnostic capabilities and achievements to permit each child to have his needs known in a specific way.

4) Achieve greater diagnostic accuracy and sensitivity by combining physical, behavioral, and psychological evaluations.

5) Make services available to handicapped and retarded children, whose needs have been frequently badly neglected.

Evidence and testimony.

1) There is a fairly wide literature on family-oriented health care, which we have only sampled (Haggerty, 1962; Haggerty and Alpert, 1963; Beloff and Weinerman, 1967; Beloff, Snokes, and Weinerman, 1968; Beloff and Willet, 1968; Silver, 1963). While it has not been tried on a large enough scale to make full scale endorsement reasonable, the arguments for it, in terms of enhanced diagnostic capabilities, treatment success, and patient satisfaction, are strong enough to warrant Federal investment.

2) In Chapter 11, we presented a matrix of child health needs and a partial examination of programs which might meet those needs. Two of the largest misfits were the lack of early systematic screening and treatment, and the uncertainty of the goals and usefulness of the Children and Youth program as a free-standing entity.

3) There is considerable evidence that neither physicians nor teachers alone do as well in diagnosing the needs and problems of children as they do together, or with such professionals as psychologists, social workers, or in fact with parents (Werner, Bierman, and French, 1970; Kleisinger, 1971; McAnarney et al., 1971; Starfield and Sharp, 1971; Eisner and Oglesby, 1971; Jacobsen and Siegel, 1971; Wagner, 1971; Sarason et al., 1966).

4) The evidence for the potential of preschool intervention to help retarded and handicapped children has been reviewed elsewhere (Chapter 12). We merely note here that full attention to the needs of these children has never been given, and that the potential of multi-service programs seems promising.

> Perhaps the most important deficiency is lack of a clear-cut national commitment and policy that care of the handicapped child is an integral part of total responsibility of government toward its population. Unless the problem of the handicapped child is viewed as a humanitarian obligation--as a concrete, important domestic problem, requiring adequate economic and technical support--the creative programs required will not be forthcoming (American Academy of Pediatrics, 1971, p. 58)

5) Evidence on the potential for family involvement in multi-service programs involving their children has been presented in the preceding section of this chapter (family intervention strategies).

Suggested strategies.

--Gradually transfer Children and Youth money and functions into Family Health Centers or similar programs.

--Combine the efforts of Crippled Children, Head Start, Health Start, and state efforts at special education into a comprehensive, targeted program of multi-service centers, with strong contractual or other ties to large health systems.

4A. Broad emphases in child health programming;[9]
Diversification of pediatric manpower.

Rationale. The young child is generally dependent upon the actions of his or her parents (seeking care, choosing appropriate caretakers, carrying out treatments, preventive care, and providing health and nutrition education). Thus to the extent that parents are not permitted full knowledge of, participation in, and responsibility for their children's health, the present, professionally dominated system does not optimize child health and creates undue dependence.

Pediatrics remains basically a middle and upper class, white, urban, and even regional specialty (AAP, 1971, p. 98). With the continuing reduction in the number of general practitioners (who provide about 75% of all care to children), an already severe maldistribution problem has worsened in areas of scarce population and/or economic deprivation.

Pediatric practice itself has become more family counseling than health care as the rates of mortality and acute morbidity have continued to fall. Pediatric specialization, on the other hand, has become even more isolated from the disease patterns of the whole population as it has dealt with the increasingly complex needs of the children with multiple handicaps and rare metabolic or genetic disorders who in earlier eras would have died for lack of treatment. The split suggests that a single form of medical school education will be increasingly inappropriate.

Because of the demonstrated importance of prenatal care and good obstetrical services in reducing perinatal stress with their concomitant after-effects, an increase in Ob/Gyn manpower sufficient to serve all women in need could serve as a trade-off for more manpower and other resources for later pediatric and adult medical care.

Intended Effects.

1) Diversify mix of manpower to include such people as child health associates, pediatric nurse practitioners, physician assistants, nurse midwives, outreach workers, family health workers, and ombudsmen.

2) Extend the content of pediatric practice to incorporate the expertise of other disciplines such as nursing, behavioral science, social

---

[9] Because the issues in these recommendations are so much broader than the reports we do not suggest specific strategies for implementing the changes we advocate.

work, nutrition, and community organization.

3) Increase parent involvement, satisfaction, and responsibility.

4) Increase professional accountability to parents.

Evidence and testimony.

1) Many of the new roles proposed are being successfully developed now in training programs: pediatric nurse practitioners (Silver, 1968; Ford and Silver, 1967; Silver, Ford, and Day, 1968); child health associates (also being done by Silver at Colorado); physician assistants (Stead, 1966); and family health workers (Wise, Torrey, et al., 1968). There are some studies testifying to their acceptance by physicians and parents (Patterson, 1969).

2) Several investigators report general conclusions on the benefits achieved by task delegation and division of responsibility between pediatricians and allied health personnel (Haggerty, 1970a; Yankauer, Connelly, and Feldman, 1968). The related evidence concerning multiservice programs has been summarized above under recommendation (2).

3) One of the major stumbling blocks to implementation will probably be state licensing laws.

We should not that the issue of the relationship of parental involvement to compliance and satisfaction of professional accountability, extend beyond the scope of this report.

4B. Improvement of financial support for child health services.

Rationale. In this case it is simple: children cannot be expected to pay for services their parents cannot afford.

Intended effects.

1) Encourage deemphasis on hospitalization, and emphasis on preventive, diagnostic, and other ambulatory services.

2) Achieve greater equity in terms of Federal support or payment for child health services in relation to those for the elderly.

3) Increase proportion of child health care payments made on the basis of right rather than as charity.

4) Increase financial access of disadvantaged groups (primarily the indigent, the medically indigent, and families with medical catastrophies

--multiply handicapped children, etc.), with expected extended effects on utilization patterns, health attitudes and behavior, and psychological access.

Evidence and testimony.

1) The American Academy of Pediatrics (1971) estimates that more than 90% of child health care is delivered in outpatient settings, and that about 50% of the care consists of health maintenance instead of illness care. However, private and public (Medicaid) insurance and other payment systems are heavily weighted toward inpatient coverage to the exclusion of outpatient care (Somers and Somers, 1961). Evidence from Kaiser-Permanente, HIP, and other plans which tend to provide greater coverage for all services demonstrates often dramatically lowered rates of hospitalization and increased use of such preventive services as office visits and prenatal care visits (Donabedian, 1969; Greenburg and Rodburg, 1971; National Advisory Commission on Health Manpower, Vol. II, 1967; Klarman, 1963; Peters[illegible], 1971; Saward et al., 1968; Perrott and Chase, 1968; Alpert et al., 1968). Although much of the data in these studies does not pertain directly to children, some of its does--such as the demonstrated reduction of unnecessary tonsellectomies. It should also be noted that most of this data comes from systems which provide not only more reasonable coverage for care but also more organized and accountable systems of delivering it. Thus, we believe it important to stress organizational factors in providing any expanded insurance system.

2) In Chapter 6, we demonstrated that the Federal government is currently not investing in children's health to the extent which it is in the health of the elderly (the other group in the society most clearly out of the productive cycle)--even controlling for the much greater need of services by the elderly (see Table 6.48, Chapter 6). In 1967 (after all of the major new health programs of the decade were funded), the government paid only 10% of the total personnel health expenditures for persons under 15, but paid nearly one-half of the total for those over 65 (Breslow, 1969). The 1973 Budget (U.S. Office of Management and Budget, 1972) reports that figures show the Federal government contributing 54% of total health costs for the elderly, and 16% of those for children under 18. The trend is toward greater equity but it is extremely slow. Clearly the reason for the greater percentage coverage of health costs for the elderly is Medicare, which has established reasonably broad coverage by right for all elderly citizens. Since extending similar coverage to children is essentially a question of belief or political expediency, there is no sort of evidence or testimony which would be persuasive as to why it should be done; but certainly there is no evidence that coverage for children would be anything near as expensive as coverage for the elderly on a per capita basis.

3) One of the greatest failures of child health programs to this date has been their inability to provide real alternatives to welfare medicine

for the poor or disadvantaged. There may be a few new Maternal and Infant Care centers and so on, but for the most part what is available is still indigent medical care in which, as Yerby noted, "patients are forced to barter their dignity for their health" (Yerby, 1966). By far the largest program providing funds for child health services is Medicaid, a state-controlled program which, unlike Medicare, is a part of the welfare system. Haggerty (1970b) has summed up the issue well:

> Perhaps more important than the relatively small total amount which the federal government allots to child health is the disproportionate amount which goes to forms of care that are increasingly unacceptable to the American people and to the medical profession. Less than one fourth of the present federal funds for child health go to maternal and child health and OEO programs that are designed to overcome older patterns of second-rate care based on the "means test". (p. 329)

An analysis done for the OCD Child Health Care Policy Task Force (Minnesota Research Systems, Inc., 1972) reports the following estimates of Federal Medicaid expenditures for children (i.e., not including state matching funds):

| | |
|---|---|
| FY 71 | $0.7 billion |
| FY 72 | $1.8 billion |
| FY 73 | $2.0 billion. |

Two things are apparent. First, the bulk of all services to the poor are clearly coming through Medicaid. Second, one of the estimates is off since Medicaid appears to be paying out more than the Federal totals. Since the figures in the Task Force document are unpublished ones, we would tend to consider them high (they may also include administrative overhead and non-service payments).

There has been no relative expansion of the role of non-welfare service delivery modes in the last few years. There are still the same number of Maternal and Infant Care centers and Child and Youth projects as there were in 1970 (OMB, 1972), although their funding has increased $25 million (from $75.8 million to $101.3 million).

4) Current estimates of the total cost per child of comprehensive health care are really guesses. The cost depends very much on what is included in "comprehensive" and, more importantly, what kind of system is delivering the care. For example, the minimal annual budget per child (not including overhead) of a Health Start program offering examinations, testing, treatment (through referral) and follow-up plus health education is put at around $220 (for a 200-child project and eight weeks of health education) (Nay, Vogt, and Wholey, 1972). On the other hand, Kaiser-Permanente provides comprehensive care, including hospitalization, to members of all ages for an average of $120 per capita (AAP, 1971, p. 139; National Advisory Commission on Health Manpower, Vol. II, 1967). The difference lies in the size, group practice

organization, experience, and financial resources of Kaiser.

In Chapter 6, it was noted that health insurance coverage, which presumably would be of most benefit to those without resources to meet medical emergencies, is in fact a function of family income; those most in need are most likely to be unprotected. And although the evidence is not completely consistent, there is every indication that the poor are also ill more seriously and more often. (Haggerty, 1970a; Kasl, 1972; Lerner, 1972)

Thus, equity would seem to require either more services than (at least for a period of time) or benefit coverage which is at least as liberal as, that of the affluent. On this score, it is disheartening to read the Child Health Care Policy Task Force (1972) discussion of the benefits proposed under the Administration's health insurance proposals; the Family Health Insurance Plan (FHIP); and the National Health Insurance Standards Act (NHISA)--the former primarily for indigent families and the latter for employed persons and their families. Neither FHIP nor NHISA (the more liberal of the two plans in its provisions) propose to cover the following services which would seem vitally important to achieve comprehensive care for children:

psychological or psychiatric services
nutrition services
speech therapy
vision and hearing screenings as needed
eyeglasses
hearing aids
prosthetic devices
physician nurse and allied health personnel services
supportive social services
outreach services.

In addition, FHIP does not cover the following items covered by NHISA:

prenatal care for and birth of first child
catastrophic health insurance protection.

The Task Force estimates that it would cost only $50 million to make those two NHISA benefits available to the child population of FHIP, a group most at risk of perinatal complications, lack of access to prenatal care, and congenital problems (often requiring huge medical investments). The group makes no estimate of the cost to include any or all of the other needed services. It should be noted that, by comparison, the "welfare" medicine of Medicaid is comprehensive and liberal. This is particularly so because of the recent regulations mandating coverage of diagnostic screening and follow-up for all eligible children under 21, although state variations on performance and eligibility exist. Similarly, existing programs under Title V (Maternal and Infant Care, Child and Youth, etc.) and Section 314(4) have much greater potential for comprehensiveness despite their relatively few numbers of users.

4C. Improvement in general environmental conditions for children.

Rationale. Again, we believe this recommendation is basically fair --valid in health or any other terms.

Intended effects.

1) Achieve results in terms of improved child health impossible for health programs per se.

2) Preventive method to reduce the rates of infectious disease (TB), stress (from overcrowding, poverty, noise), malnutrition, and ultimately infant mortality and morbidity.

3) Expand accepted models of health service to include the notions of non-specific disease agents, multiple causation, and psychosocial variables.

Evidence and testimony.

1) The multiple linkages between poverty and health suggest that any intervention to break the cycle of poverty might also affect health. As Haggerty (1970a) has said, "There is no doubt--the greatest disease of the poor is poverty." (p. 78) Dr. Lowe, Director of the National Institute of Child Health and Human Development, has expressed similar convictions concerning nutrition:

> I maintain that the root of evil is poverty, and that through tolerance of poverty we have exposed our people, especially our children, to malnutrition. The role of government must lie, at least in part, in an attack on poverty and malnutrition through economic activity. (1971, p. 647)

2) A suspicion of tremendous environmental insult is roused by looking at Indian infant mortality rates, which are better than the national average for early neonatal (less than one day), but significantly worse for late neonatal and post-neonatal periods (7-28 days and 28 days to one year) (AAP, 1971, p. 153). Much of this mortality is due to infectious diseases such as tuberculosis and trachoma, which show incidence rates well above average. But the pattern reflects the cultural constraints of modern medicine. In the hospital, care can protect the newborn child from disease. But when the child is living in the hogans in which everything including livestock lives and eats on the floor, the impact of health care is much less. A study of the six year Navajo-Cornell Field Health Project comments:

> The effectiveness of contemporary medical technologies is far more dependent on the socioeconomic circumstances of

> the recipient in the case of the infant than it is in the case of older children....Modern medical technology has relatively little to offer infants who are located in an unprotected home environment. (McDermott, Deuschle, and Barnett, 1972, p. 29)

This conclusion is supported by the description of the health problems of children presented in Chapter 11, particularly the great risk of infectious diseases due to low immunity of young infants.

It is interesting to note that the authors of the above report go on to hypothesize, on the basis of much professional testimony, that the reason that childhood mortality is concentrated in the first year, with the next three being much more safe, is that the Navajo, while poor and not too healthy, have what appears to be an adequate food supply which includes animal protein.

3) There has long been a belief that the great advances in health and the declines in mortality have come from the effects of public water supplies, sanitation facilities, and general public health efforts--not through the efforts of medical science. Certainly the fall-off in the rate of decline in the infant mortality rate (which seems to be characteristic of all advanced countries that have passed the stage of massive malnutrition, poor sanitation, and unsafe water) would support this thesis. Thomas McKeown (1965) has also argued that historically the great advances in health indices were primarily the result of improvements in basic living conditions. While this hypothesis is difficult to prove after the fact, the persistent differences between white and non-white measures of health, and the overwhelming severity of the needs of Indian and migrant children suggest that attempts to alleviate the conditions in which they live might prove more beneficial than attempts to cure the clinical results of such conditions.

4) In an extremely provocative article, Bernard Bloom (1965) has called for a reconsideration of the long scorned "miasma theory" model of disease, which preceded the current medical model based on contagion, specific etiology, and disease-specific cure. The miasma model stressed prevention of diseases and treatment as an arrangement of optimal conditions for the patient to help himself, and did not believe in germ or other precise diagnosis. "The major technique for disease prevention was to attempt to modify the environment by removing the sources of the miasma" (p. 336). Thus began the public health movement and the removal of filth; what is important to note is that the source of cure does not lie within the individual but in the community around him. Bloom presents the miasma theory as one with particular relevance to community mental health, but its synthesis with present theory can be extended further. An excessive concern with exact etiology and precise diagnosis may prevent medical personnel from designating children as "patients" for care or from diagnosing a syndrome which incorporates non-medical factors. Along these lines, Wagner (1970) reports a syndrome found in children resistent to a cognitive stimulation program

which included "increased frequency of infections, increased frequency of child abuse, decreased maternal interest in the child, and marked irregularity of meals provided to the child." (Wagner, 1970, p. 869) The intervention strategies suggested by such a syndrome clearly must address issues that go beyond the individual child.

## Real and Apparent Omissions in the Recommendations

Unlike the "Work with the family" recommendation, it is not possible to logically subdivide health care into logically apparent subsets of strategies which in a general way cover all possible strategies, and then review the evidence for and against each. The field is too broad, the options much too varied, and the evidence concerning many too sparse to permit such choices. Hence, the four recommendations which we have finally developed may seem both arbitrary and unconnected. We have pointed out earlier that in fact they are not a comprehensive child health strategy, although we believe they address the most critical needs for a child health policy, with the exceptions of family-centered comprehensive care systems and financing mechanisms.

The following topics are raised briefly to answer questions readers may have as to why these issues are not included explicitly in the recommendations. The above title reflects the fact that certain of the topics are omitted because we did not have time to fully develop them or felt them peripheral to a child development focus. Others are not recommended because we did consider them and received negative recommendations as to their efficacy, appropriateness, or value.

1. Child abuse and other "socially-derived illnesses", (pica, accidents, plumbism). While, as detailed in Chapter 6, these problems are very serious, we do not feel the medical model is the most appropriate intervention strategy. Because of the isolation of most medical systems from community action efforts or social welfare agencies, the medical model usually results in children being treated or hospitalized, having symptoms or gross problems (fractures, malnutrition, etc.) reduced, and then being released into the same environment (both familial and socioeconomic/political) which precipitated the "illness".

We feel that child abuse and neglect can be best dealt with within the framework suggested by the previously discussed social service referral system of families, with appropriate medical attention being only one part of a comprehensive aid to the family. Similarly, while screening for lead paint poisoning and pica and continued research for better preventive or curative methods are essential, we cannot advocate massive new efforts in these areas as it would appear that no real gains can be made until housing and nutritional standards are changed. Furthermore, the strategies that could be employed in these areas (e.g., 24-hour registries for suspected abuse cases or calls for help from parents, joint intervention programs, accident prevention, etc.) can most effectively be done by states or local communities, since present knowledge of effective models is too scanty to guide Federal regulations (Newberger, 1971).

2. Pediatric facilities. There should be virtually no residual debate over the need for additional pediatric hospital beds. The future will probably see regionalization of tertiary care-oriented pediatric centers, which because of their population base will be able to afford and utilize highly specialized but occasionally life-saving equipment and staff (hyperbaric chambers, pediatric cardiology and heart surgery teams, etc.). With the exception of maternal and infant centers and family planning activities, which we have discussed in Recommendation (2), we feel other pediatric care and planning should take place within the more general framework of comprehensive health planning agencies and comprehensive health care systems. That is, there is no need for a separate mandate to regionalize pediatric facilities beyond that of 314(a) and 314(b) agencies; the need for ambulatory care facilities for children should be met in conjunction with planning for NHC's, HMO's and hospital outpatient departments.

Recommendation (1) and the Preschool section of Chapter 12 have addressed the critical need for such broad systems to make outreach to young children--for screening, diagnosis, treatment and rehabilitation--a first priority.

3. Dental problems. Although it is our feeling that poor dental health contributes to poor general health and below capacity school performance (due to difficulties in eating, chronic pain of toothache), the evidence is not sufficient to justify its inclusion as a child development need. In addition, the gaps in dental care are even worse than for medical care, and are even more income-dependent (see Chapter 6). Dental manpower shortages also are extremely severe; the realistic feasibility of mounting a full scale program is small at the present time.

On the other hand, there is a simplicity in the delivery of dental care which suggests that manpower and financing strategies might virtually eliminate most present gaps; there is less middle-class bias in dentistry than in pediatrics, psychiatry, or obstetrics. From another approach, water fluoridation may be the strategy of choice. It has consistently led to rates of caries in children under 18 that are 60% less than in untreated communities (recent data from Newburgh, N.Y.). It is, however, a strategy which must be implemented at the local level; the Federal government could, and does, support such action with technical assistance and capital financing.

4. The role of multi-service programs. There is currently much enthusiasm for programs which treat the "whole child" and see his development and happiness as the joint functioning of physical, emotional, social, and psychological systems. The positive vision of such efforts is a coordinated, comprehensive set of services provided by teams of appropriate professional and non-professional workers, as well as parents, in exactly the right proportions for each child. The negative vision, however, is of a child being "mauled" by several people who never really learn to work together as a team, all trying to "intervene" in his development at the critical time with the most powerful weapon, not necessarily of any tested

effectiveness. In this recommendation, we do not argue for the general validity of one or the other of these visions, but look at the role of health care in such "comprehensive" programs.

We find very little evidence that the combination of health care with educational and social work or psychological components into programs specifically designed as "whole child" approaches increases the effectiveness or the level of the health intervention from what it would have been alone. That is, while it is true that Head Start and Health Start have provided diagnostic services and some treatment for many children not already receiving health care, it is not demonstrated that Head Start has done any better than an aggressive Child and Youth project or neighborhood health center could have done. A strong indication of the actual lack of coordination or meshing of the disciplines is the continued lack of evaluations that combine educational (or psychological) goals with health goals.

We have found, however, that there is demonstrated benefit from the cooperation of professionals in diagnosis and in carrying out treatment. The models which seem to work best have rather different philosophies, but seem appropriate in certain situations.

# Chapter 14: Comments on Future Analysis

## Summary

The data base for a study such as this consists of three kinds of research activity: (1) analysis, (2) problem and program studies, and (3) basic research. How could one facilitate planning in the future?

We suggest that a permanent intramural analysis group be set up within HEW to provide for a continuing synthesis and analysis of information about programs for children. This group would not be concerned with day-to-day planning activities, but it would have periodic responsibilities to provide a comprehensive analysis of programs for children. We suggest that one or two extramural groups be established to assist in the development of analyses, and to provide possible other perspectives about program guidance.

We do not make recommendations about the furtherance of problem and program studies and of basic studies, because there are present trends toward a greater quality and quantity of relevant research activity in these areas. This seems manifest in the development of agency planning functions, and in the move toward interagency coordination created by the Interagency Panel for Early Childhood Research and Development.

There seems to be a division, roughly, between the kinds of problems faced by traditional child welfare legislation and programs, and many of the newer group of problems brought in by the recent poverty initiatives. The former are problems of children in trouble because of personal crisis or risks in the immediate environment; the latter are problems of children who have statistically poor chances of social status later. These are termed "child welfare issues" vs. "social issues".

It is probable that the "social issues" are not uniquely issues of childhood, nor uniquely to be addressed by analysis or programs confined to childhood. Such problems relate to the following questions:

-- Do we have more education than we need? Do we have the kind of education we need?

-- Are the existing child care professions still fully viable? Can we solve problems by multiplications of them? Are the professional structures the reasonable sources either of problem definition or of advocacy?

-- Can social institutions replace the family for the child? Is it possible for us to strengthen the family in its relation to the child?

-- Can we provide more openings for productive labor? Can we provide more distributed dignity of labor?

-- Can we create a political socialization?

-- Can we find some way to remain competitive as a society without crushing competitiveness within? Where and how can we assert "quality of life" values for families and their children?

The "child welfare issues" now dealt with by programs for children can probably only be solved by efforts to obtain the long-sought-for services that are individualized, relevant, comprehensive, and coordinated. This will probably not be established by new programs for comprehensiveness established on a historic bed of old programs. Most likely, it will require changes in the management of existing programs.

Probably, in the long run, effective services could be obtained by extensions of existing health and school service bases. The fundamental innovation needed is an effective provision for local management and accountability.

# Chapter 14: Comments on Future Analysis

What is the data base on which one plans federal programs for children? How could one improve the base to make planning better, and how much can the base be improved?

It is time, in this final chapter of this report, to say something about the process of the study as well as its products. As anyone knows who has been in the midst of a research or analysis effort, what comes out of such a study does not look much like what has gone on within it. The report of the study looks linear, logical, reasoned, like an invincible progression from evidence to conclusions. At least one tries to make the report look that way. What goes on within the study is much more complex. It involves confusion, the discovery of questions as well as answers, and the persistent attempt to find the best intellectual structure for the analysis.

There is a long-standing view of human learning that argues that it is intrinsically an additive process. Learning adds something to the individual -- facts, skills, values, attitudes, "behaviors", "changes in behaviors". There is another long-standing view of human learning that argues that it is intrinsically a differentiative process. Learning is getting a little bit less confused. One begins with an uncertain, noisy field of signals. Through differentiation of the field, through the development of perceptual and intellectual structures, one organizes the field and reduces the uncertainty. We will really only understand human learning when we come to understand how these two views of learning, the additive and the differentiative, are really only one view. When we learn, we add facts, we "change our behaviors", and in so doing we get less confused.

One can and should bring this double-aspect conception of human learning into an understanding of the process of a study such as this one. The additive process goes on steadily -- the accumulation and assessment of findings, the piecing together of the findings to make more general judgments. At the same time, there is the differentiative process. What is the issue here? How much can one really tell using these data? One part of the differentiative process has already been noted in Chapter 1, and then subsequently in Chapter 2. It took us time, and several steps, to arrive at a judgment about what the issue of "disadvantage" in children amounted to.

Another part of the differentiative process cannot be completely documented here. One asks oneself what a study like this is really doing, and how much it can amount to. As was noted in Chapter 1, this has been a study largely resting upon formal data, and the systematic use of formal data is a new and uncertain business in federal program planning. There were numbers of informal discussions about this, both within the project and with visitors to the project. One consultant, Professor Martin Rein of MIT, was particularly helpful during these discussions. At one point, we asked him if he would try to embody his point of view about the relevance of research to policy in a working paper, and he has done so. His paper, "Values, Knowledge, and Social Policy", is included as an appendix to Part III. The paper does not offer a complete -- nor, probably, a consensual -- assessment of the group's view of the meaning of an analysis such as this one. But it goes a good deal beyond the common belief that an analysis of data amounts only to adding up the facts, or looking at what the facts tell us.

## The Data Base for Planning

A broad agency like HEW makes resource allocations directed towards children's health, education, family and environmental circumstances. Decisions that must be made at the planning level implicitly or explicitly draw upon a diversified set of research and development activities concerned with child development.

Planning uses what is currently available from basic research and basic theory, in that it rests ultimately on the existing understanding of children's learning, motivation, personality, perceptual and mental abilities, etc. It draws upon studies of the influence of a great number of physical and social factors on the child's development. It draws upon what we know or guess about the effects of training and therapy.

At another level, planning draws upon problem and program studies. It uses surveys that establish the incidence, distribution, and time trends of problems, or of positive and negative factors influencing children. It uses program analyses and program evaluations.

At still a third level, planning draws upon analyses and is a species of analysis. Analyses are synthetic efforts that try to piece together data to form judgments about policy-relevant questions.

In order to have effective planning, all these data bases -- basic research and theory, problem and program studies, and analyses -- must be fairly strong. If one considers the various data sources on which an analysis such as the present one depends, one quickly recognizes how manifold and distributed they are. There are, probably, only very limited ways in which one can stimulate the development and betterment of the data on which planning for children must depend. This chapter will briefly consider a few organizational changes that might facilitate planning in the future. Then, in a second section, it will consider some large questions that have arisen in this study and that seem to require further consideration and analysis. In a third section, we try to outline some kinds of research that might be helpful for a study like this one in the future.

## Organizational Changes to Support Planning

The studies and literature reviews that formed the primary basis of this analysis appear to be only the leading edge of a much larger following wave of research and analysis concerned with programs in child development. One can believe, today, that the recent efforts to develop planning in federal agencies have begun to bear fruit. If we have begun to solve the problem of relevant data production, it may now be time to begin to address the following problem: that of data synthesis and integration.

There is every sign that the kinds of research considered by this study will accumulate in greater and greater volume over the next few years. Program development efforts by various agencies have led to a large number of pilot and demonstration projects. Surveys have been commissioned to study the utility of various interventions -- special studies of entities like preschool programs for bilingual children, the relative efficacy of various kinds of computer-assisted instruction, effects of media on children's education, the effects of amphetamines on school problems, etc. These studies do not automatically come into contact with or form larger synthetic judgments. It has been a common experience during the conduct of this study to find agency people in one segment of Washington unaware of research directly relevant to their concerns existing in another agency, or at times within another subdepartment of their own agency.

One way to bring information together in order to estimate its relevance for program planning is, of course, to periodically commission some such study as this one. An outside group is brought in. There are some advantages to this. First, it does allow planning to draw upon people and competences that might not be freely available for an extended effort in Washington. Second, the use of an outside group may make estimates that are less constrained and more credible than that obtained within the government. However, there are also some disadvantages to the use of an outside group. Unless the analysts are unusually sensitive to the considerations that exist in policy planning, they may be unresponsive or they may have to spend time learning how to be responsive. Outside analysts do their work within an allocated time. The group is temporary and, when the study is over, the group and its competence may well dissipate. If there is a need for further analysis, one must, in effect, begin over again.

The business of using formal data for policy is new and not yet settled. It is conceivable that, ten or fifteen years down the road, we will find that formal data and objective indices proved to be of rather marginal utility for government planning. Government planning has traditionally depended upon semi-formal testimony from informed practitioners in the field. Such practitioners offer judgments backed by whatever data they can marshal. The predominance of the experienced practitioner and his testimony must not be underestimated. It is true at this time that there is no way to construct a rational intervention program on behalf of children without a heavy use of practical judgment.

However, the volume of data and the attempt to contour it toward program relevance is unquestionably on the increase. What one can find today on a survey of the literature provides no guarantee of what one can find tomorrow. Because so much now seems to be in its infancy in the areas we have surveyed, it seems reasonable to believe that there should be developed in the next few years a fairly chronic effort to maintain and develop a synthetic analysis of the significance of existing data for program management. An organization which might accomplish this would perhaps be the following:

(1) There would be a staff of between 10 to 20 people who would be given below. Periodically, the staff would be charged with the development of a major survey and estimate of the direction of programs for disadvantaged children, something like the present report. There might be such a major report every five years, with every second report timed to be delivered in time for the decennial White House Conference on Children.

(2) The group would have competences suitable for an analysis of a diverse set of programs bearing on child development. Members would understand the issues for programs of educational, family, and health intervention. In addition, the group might include individuals who were sophisticated about federal program management, about economics, about systems analysis and planning.

(3) The group should not have responsibilities for day-to-day planning decisions. It would be consulted informally when the time came for formal program decisions. It would have scheduled formal reporting responsibilities as indicated above. It would, on its own initiative, develop analyses that seemed productive and it might commission and monitor outside analyses.

(4) The location of this group might be as an adjunct to ASPE. It could conceivably be established in association with the just-established Information Secretariat of the Office of Child Development. Or, it could conceivably be attached to the just-formed National Institute of Education, or to the National Institute of Child Health and Human Development. What is most critical is that the group be so placed that it can attract the people it needs, and that it can maintain an interagency analysis. Its issue would be the orchestration of agency efforts for the benefit of children.

(5) The analysis group is conceived of as parallel to the central analytic group (the "think tank") of the National Institute of Education. Would it be redundant? Inevitably it would. There is the question, in the management of a large agency like HEW, whether one should have function-oriented or people-oriented analysis. Is it most efficacious to plan in terms of education as a whole, partitioning according to various consumers of education? Or is it most useful to think in terms of young children, partitioning according to functions of education, health, housing, etc.? There is probably no one answer. For the near future, at least, it might be worthwhile to try cross-cutting analyses that partially intersect one another, such as would happen if one group plans in terms of education as a whole and another plans with reference to disadvantaged children.

(6) It has been our experience in this project that the volume of data that must be analyzed, and the general lack of certainty with which one can discern trends in the data, inevitably call into play a great deal of small and large judgments. This seems reasonable. One must be fully prepared to mix judgment with close following of data if one wants to address any of the larger questions to which data are applied nowadays. But the constant exercise of judgment may bring about something that is not fully desirable, a kind of "judgment of the whole" or a "house" point of view. A group interacting on ambiguous questions thrashes out issues repeatedly. After a time, something consolidates which must be fairly regarded as a kind of bias of the project as a whole. It seems unreasonable to allow one bias, one school of thought, to completely dominate recommendations on such important issues treated in this report. It might be advisable to establish one or two other groups, perhaps not in complete redundancy but with some reasonable division of labor. One possibility that seems reasonable to us is the establishment of an "OEO-Wisconsin" relationship. One intent of such a split arrangement would be to create a useful dialogue between groups that could be confidently expected to not always agree. Another intent would be to "seed" a larger body of general competence for the analysis and consideration of planning- and policy-relevant questions.

## Basic Research and Program and Problem Research

An analysis of this kind at least is dependent on the state of the art of basic research and problem and program studies. We make no organizational recommendations about these lines of effort to support planning, primarily because it is our informal impression that positive and useful organization is now under way. These are trends like the following:

1. Agency planning offices are noticeably increasing in staff and strength of staff.
2. The products of agency planning functions are manifestly becoming more abundant and more useful. There is, in some areas, a good quantity of evaluation data. There are reasonable program studies and analyses. Planned variations studies are being tried.
3. The planning of future program development, and future research development, has been established as a principle.
4. An effort is now under way to establish interagency coordination of planning and research efforts as they concern children.

Part of this judgment rests upon impressions gathered through interaction with some agencies during the course of this study. Part of it rests on the December, 1971 document, "Broad Agency Goals and Agency Research Objectives for FY 1972", compiled by the Information Secretariat for the Interagency Panel for Early Childhood Research and Development. The document gives reasonable testimony to the existence of within-agency organization now capable of extremely reasonable research planning, and to the existence of at least a skeleton framework for between-agency cooperation and coordination.

Probably, studies such as this will become easier and easier in the future, as trends like the above are consolidated and strengthened.

## Some Further Questions: The Social Issues and the Child Welfare Issues

One central and recurrent set of questions in the study had to do with a felt division of the issues of disadvantage in childhood into what one might call "social issues" and "child welfare issues". There is a good amount of evidence that children are in trouble in our society. They are in trouble in part because of personal crises or risks in their immediate environment, or they are in trouble because of a serious probability of poor life chances later. There seems to be a division, roughly, between the kinds of problems faced by traditional child welfare legislation and programs, and many of the newer group of problems brought in by the recent poverty initiatives.

It seems likely that future analysis will have to go in different directions with respect to the risks for children posed by social and child welfare issues. Many of the risks to children by social issues are only argumentatively specific to children, localizable in the children, or addressable by programs that direct themselves toward providing services for children. Such a problem, for example, may be the problem of "equality of educational opportunity". To address problems such as these, we may require analyses which consider the child in relation to the shape of the adult world--the "fit" of the social frame to children and the families that rear them.

On the other hand, the risks to children assignable under child welfare issues must be addressed by programs of service to children. Future planning addressed toward such programs should probably address adequacy, the coordination, or the coverage of such services.

## Social Issues

We have confined ourselves, under our mandate, to the body of data that gives information about child development and about the effects on programs related to child development. But there were again and again questions that rose out of these bodies of data, that depended upon other data or other kinds of questions asking for a proper address.

Some questions will be raised here about the shape of services for children which look somewhat like "social planning" questions. They are questions about "The System". It seems reasonable to be suspicious about social planning. Social institutions do not yield very well to the limited capacity of the human mind--to theories--because they are too complicated and too subtle. Social planners have reasonably earned the charge that from time to time they are susceptible to some megalomania and some fanaticism. But, still, some of the considerations in this study have suggested that the trends of the last few decades have formed a plan, an unplanned plan, which may deserve some consideration. A series of simple, rational acts taken by individuals in a society can add up to some scheme that is not intended and that is not really what anyone wants. A whole forms that is larger than, different from, and less desired than, any of its parts. A striking illustration of unplanned planning is given by Schelling (1971). The questions that arise ask whether our social ecology, like our physical ecology, may not now be worth some thought.

### Do we have more education than we need? Do we have the kind of education that we need?

Both the contemporary discussions and the contemporary data about public education generate a great deal of confusion. On the one hand, there seems to be much public faith in education as an absolute good. More education is advocated as a solution to many social problems. Another stream of public discussion, however, is marked by a relentless attack on the meaningfulness of various segments of education--the college, the high school, the elementary school. Coupled with a consistent feeling on some sides that more education will do our society good, there is an equally persistent argument that nothing short of radical reform in education will save it. If we examine the data, we find similar ambiguities and confusions. There are arguments that education is a clear predictor of a successful later life. The primary definition of SES used in most studies depends in part on education and in part on income -- which itself correlates with education. On the other hand, one can find equally cogent arguments to the effect that such correlations as exist between education and income depend not upon the validity of education *per se*, but upon the certification that education gives to its possessor for use as the selection criterion for higher paying jobs. Furthermore, one can now find arguments that, on the whole, American society has more education than seems justified by its vocational and economic needs.

These arguments must be of some serious concern, because of a manifestly rising problem in school finance. Educational costs, which are 80% service costs, are rising and there is increasing resistance to the local taxes that would pay for increases in education. No one questions the established value of education, so there is little discussion of a serious cutback. Rather, various schemes have been put forward for relieving the burden of educational costs on property taxes by moving them to other forms of taxation. Proposals to extend compensatory education to the disadvantaged, inevitably requiring surplus money and extra costs, simply exacerbate the problem.

One can at least raise the question of whether we are not now simply multiplying many private interests into the semblance of a public interest. For any individual in our society, the value of education is clear. The more education one gathers, the more one is entitled to income and status, accepting either the substantive or the credentialing argument about the value of education. It makes sense, then, for people to unanimously agree on wanting as much education as possible for their children. However, it is not at all clear that ever-increasing education is fully meaningful for society and fully in the interests of the children. Our brief review of history in Chapter 2 has touched on the interesting and touchy relationship between the decline of child labor and the great increase in public education near the turn of the century. There can be no question that some of the relinquishing of labor in favor of education was in the genuine interest of the child and of society. But it is not completely clear that all children in our society now require the amounts of education that they get, or that they are being exhorted to get. One can ask whether much of present schooling is not, still, "makework" -- a protection of a limited labor market which, today, would probably not hold children even if they wanted to participate initially.

One reason why there may be so much contemporary pressure for radical school reform may be that so much of what schools do is not essential or even useful to the child who spends time in school. Some now hold that schools should become places for the total cognitive growth of the child, his total development as a human being. Others hold that they should be the loci of public mental health efforts. Still others hold that we should "deschool" society. Perhaps all of these reform movements are an effort to find a rational use -- or disuse -- for the time children spend in school.

None of this is to deny that some significant part of what happens in school is meaningful to the child and to the society. Nor is to deny that it is fitting and proper to place emphases in school that would be consistent generally with the total cognitive growth of the child or his mental health. It is simply to ask whether schools are as fully meaningful as we often like to think they are. Possibly, one of the reasons why present variations in school resources have so little manifest effect on school achievement is that schools are "oversaturated" with resources in terms of their educational function.

Once upon a time, education and its companion, the IQ test, could be regarded as homogenizing or leveling forces in society. At that time, one could believe that schools were an admirable democratic instrument for upward social mobility. Any child had a sporting chance. He could take an impersonal IQ test or do well on an impersonal achievement test, and make his way forward to status in society at large. Perhaps that principle is still true today, but it seems overshadowed in public discussions by the discriminatory, exclusionary functions which so many have attributed to the schools. It is now much more vehemently argued that schools and IQ tests keep people out of society. It might be reasonable now to ask what our purposes in schooling are.

Are the existing child care professions still fully viable?
Can we solve problems by multiplication of them?
Are the professional structures the reasonable sources
either of problem-definition or of advocacy?

A number of important innovations in service for children began around the turn of the century. It was during this century that the professions of pediatrician, teacher, and social worker became fully consolidated. There has been, from that time to this, a sensitivity in the writings of these "whole child" professions. One can characterize this, generally, as a sensitivity about the full professional acceptability of those who work with children and who attempt to deal with a full spectrum of their personalities and their problems.

The best established and relatively most secure of these professions, the practice of pediatrics, now shows some signs of change. The medical component of pediatric practice takes up only a part -- perhaps less than half -- of the normal professional activities of the pediatrician. That part has more and more amounted to a general practice and referral function. With the decline of general practice in medicine, a number of pediatricians have increased their purely medical work by moving into pediatric specialties parallel to existing specialties directed at adult patients. But the other component of pediatric work, the "well baby" care and consultation with parents, has now led toward a blending of interests among some pediatricians with child psychiatry, community and public health work. One of the difficulties in the way of change has been the consolidation and "hardening" of institutional practices around the originating definition of the profession.

It is not clear that social work or teaching require the extensive professional organization that they now have for the delivery of their basic social functions. This is not to deny these social functions. They are essential. It is rather to question the real existence of a profession's specialized competence in these functions. Evidence we have reviewed suggests that functions of family intervention, community service, and referral are performed well by people who do not have formal credentials in social work. The teacher has a difficult job to do, but there is serious reason to question whether the teacher's capability for exercising that job is either adequately tested or developed by programs of teacher training as they are now institutionalized in colleges around the country, or adequately certified by existing certification requirements.

There are some rational reasons for professionalization apart from what would seem to be the ostensible standard, that is, the possession of special skills and training. However, a problem for programs for children such as those we have been reviewing here comes with the proprietorship of the professions in the definition of problems in advocacy, and in the allocation of resources that now takes place in the development of social programs. It is no secret that there are functional alliances between agencies in Washington and professional constituencies in education, health, and family intervention. We have said, repeatedly, that child care professionals have a unique value in bring forth -- through experience and judgment and testimony -- what formal data will not show. But there is a major difference between professionals and organizations that speak for professionals, between physician testimony and AMA testimony.

When a program is brought forth for children, it has to now make its way through a barrage of institutionalized vested interests which are vigorous in asserting their relevance to the program and in protecting their channel into it. Since the hold that a number of such professions have on their vested services is more apparent than real, more guaranteed by license than by training, one wonders if this is always desirable.

To what extent can the existing child care professional organizations serve the functions they now serve: (a) that of defining social problems; (b) that of advocacy; (c) that of maintaining accountability through enforcement of professional requirements?

### Can social institutions replace the family for the child? Is it possible for us to strengthen the family in its relation to the child?

We have already, above, discussed the major elements of our analysis that have led to this question. We have seen, in Chapter 2, that social changes have brought about progressive changes in the "contracts" among various social institutions and families. We distribute responsibilities for the rearing of children differently today than we have done in the past. Present-day participants in the discussion point to time trends suggesting a gradual weakening of the family as a social unit. We have above, in Chapter 13, offered as a recommendation a general strategy of "working with the family rather than around it", and have there expressed the general questions which might be addressed here. To what extent can we invent ways, not only through children's programs, but through other social arrangements, to bolster the strength and the childrearing capability of the urban family? Among contemporary writers, Bronfenbrenner has written repeatedly and compellingly about the need of the child for its family to grow up adequately. We have offered program moves that might have a family-sustaining function across a small theatre of federal operations. But it is conceivable that larger and more meaningful strategies could be constructed if larger planning could be done.

## Can we provide more opening for productive labor? Can we provide for more distributed "dignity of labor"?

As one surveys the various literatures on disadvantage in childhood, one comes again and again to the point that disadvantage in childhood very frequently amounts to this: that we can predict, in childhood, that the child has a relatively low probability of a productive, dignified place in American society. If we can trace this probability back to childhood, we sometimes tend to attribute this to a problem beginning in childhood. We say that the child is caught in a "cycle of poverty". We say that his special characteristics in early childhood are indicative of the fact that deprivation, deficit, understimulation are crippling him so that he will later on not be able to take his place in society.

There is another way to look at this sequence. We can say that there is a shortage of labor, and that a series of moderately reasonable procedures are followed in the adult world to exclude some people from labor at the expense of others. If there is too little labor to go around, the less productive and less capable and less credentialed individuals tend not to be hired. Admittedly also, factors of bias tend to lead to an allocation of scarce jobs away from disfavored minority members. Our correlational literature is good enough so that we can nowadays predict very early in life who is later likely to be excluded under the selection factors now operating. But the fundamental problem of "disadvantage" in childhood may not abide at all in the status of the child, but rather in the status of the society he is later to face.

A case in point was traced in Chapter 4 above, where there was a review of the life chances of the familial "retardate" -- that is, the child of relatively low IQ without any organic damage. A better name for this kind of individual might be, perhaps, the low-ability individual. At the turn of the century, when American society was largely agrarian, there did not seem to be a problem in the future viability of the retardate. He found a place in society, not particularly a high paying or status place, but still a reasonable one where he ran little risk of social dependency. Contemporary evidence indicates that retardates achieve, at best, a marginal adjustment to society.

If there is a shortage of productive and dignified labor openings in the society at large, it is impossible to conceive of any system in childhood that would "equalize educational opportunity" or "close the gap". At best, one might devise strategies that would redistribute the disadvantage. That is, referring to ethnicity, one might devise strategies that would unbias educational opportunity or unbias the gap. But there would still remain a problem of disadvantage in childhood, a problem of the potentially excluded, that would be as sizeable as the present problem. One can associate this, again, with the historic movement towards creation of schooling in association with the exclusion of child labor.

How much of our present problems with schools and with "educational opportunity" (with the aged and with welfare) have to do with a shortage of places in productive, dignified labor? How many children want to stay in school as long as they do? How many children feel that all the schooling they get is meaningful? Will we, in a few decades, be sending most of our children to graduate school and conducting public campaigns warning them not to "drop out" before they get their college degree?

## Can we create a political socialization?

One of the traditional missions of public schooling has been understood to be that of "Americanization" of immigrant groups. With each new wave of immigrants into our society, the contemporary literature documents pleas on the part of some that the children of the immigrants be put into schools so that they might be taught the rules of the game in American society. There has been the belief that one function of schools is to bring about some kind of political socialization of children. Undoubtedly, this socialization involves more than the salute to the flag and the teaching of American history. In schools, the ideals and values of American society are undoubtedly presented in a number of informal and implicit ways. They are contained in the teacher's way of talking about things. More than that, probably, they are contained in the "rules of the game" that the schools establish for fair treatment of children.

The creation of some kind of politically harmonious community is the basic function of government. This report has included an analysis of the existing literature on the effects of desegregation on children. Unfortunately, a great deal of discussion to date has been directed toward the achievement effects of desegregation -- the argument that the movement of black students into white middle class schools will materially benefit their school achievement. The effects of desegregation on school achievement are now argumentative, but not at best very large. However, it has seemed to us that a far more important issue in the policy of desegregation is the issue of creating political stability in the future.

We were considering a recommendation in this report to desegregate schools but were not able to come to a conclusion. The staff was, and is, divided about whether or not we should have made the recommendation. An in-house memo discussing the complexity of the issue seems worth quoting in full:

The issue of racially separate public education, whether de jure or de facto, is perhaps the most critical problem for public policy, not only in child development but also in other spheres of domestic policy. Not all aspects of the problem revolve around child development, and much of the argument is legal. In order to keep discussion within the limits of our competence we shall not discuss school desegregation in its legal and political aspects. Instead we speak of the consequences of separation and contact for children of different ethnic and racial groups in schools -- public institutions whose function includes both vocational preparation and assimilation of all American children.

Three interrelated assumptions underlie the theory and inspire the moves toward ending the separation of black and white children in public schools. They are: the "melting pot" ideology, the belief that schools are a central focus of social change and assimilation, and the acceptance of the notion that contact brings benefits to children of different ethnic groups and prevents the harmful consequences of prejudice to children and later to adults. In the last decade while these planks have been reiterated and defended, they have also become increasingly subject to attack both by the general public and by social science scholars and historians. In this section, we attempt to summarize the debate, assess the arguments and hence expose the complexity of the issue.

The melting pot ideology has a long and honorable history dating to the mid-18th century letters of Crevecoeur. He early expounded a conception of complete assimilation of ethnically heterogeneous peoples into a common American identity. While the reality of incorporation of ethnic groups in American life has been far more complex and less complete, it is undeniable that most white minority groups have become assimilated in important ways. They adopted the language, common life styles, dress and shared participation in the political process. The pattern of upward mobility for newly arrived ethnic groups followed a similar pattern and was largely consummated by the third generation. Today one finds a relatively equitable representation of white and even Oriental groups -- Jewish-, Irish-, German-, Italian-, Chinese- and Japanese-Americans -- in the social class and income distributions. The major exception to the pattern of mobility and the outcome in terms of income and social class positions has been among Black Americans -- one of the first groups to arrive in America. One need only note the disproportionate per cent of blacks who are unemployed or holding low-income jobs, living in overcrowded and dilapidated housing, occupying low-status positions and in some cases still politically disenfranchised. American blacks, for whatever reasons, have not been assimilated as successfully. They have not followed the typical pattern of mobility, even if one looks only at the last two or three generations after migration to the urban North or South.

In the last decade the melting pot ideology came under attack fromm historians, political scientists and sociologists. Beyond the Melting Pot, a landmark study of existing ethnic group divisions in New York

City, illustrated that ethnic and racial distinctions did not disappear completely as the ideology had envisaged. Descendants of different immigrant groups show differences in religious observance; in family structure; in values; educational experience and attitudes; in primary relationships and links in clubs; and even in political outlook and types of participation. Since the publication of this study, we have witnessed the growth of ethnic separatist thought among both white and black popular writers as well as intellectuals. They argue not only that complete assimilation has not occurred; they question whether any real assimilation has taken place at all. Often their position is that such assimilation is undesirable and should be resisted. This represents a distortion of the Glazer and Moynihan thesis in the study, which does not deny the reality of partial assimilation and which recognizes that present ethnic groups are considerably different from their past. Glazer and Moynihan acknowledge that assimilation has occurred in America. Only it operates in different ways to make ethnic groups distinct and identifiable largely in social values and practices. One can easily accept the thesis of ethnic distinctiveness yet still be impressed by the common participation of white ethnic groups in an American polity, society, economy and culture.

A second treasured belief of Americans is the central role attributed to public schools, above all other public institutions, in solving the problems of assimilation and vocational preparation of ethnic minorities. Public educators have carefully nurtured this claim in their largely successful efforts at increasing support for their profession. Most recently the notion of the centrality of public education has been invoked by advocates of the integration of public schools. Again the last decade has witnessed a historical reexamination of the role of public schools in socializing and preparing immigrant children vocationally. Sociological analysis has attempted to measure the effect of schooling on future income and status. The general trend of the findings is that schools have not in the past and do not now play a central role in bringing about social change. Schools mirror society; they are highly responsive to the existing dominant social and political influences of the community, state and nation. However, these findings have been misinterpreted to mean that schools cannot and should not be used as a tool of social reform. It is argued either optimistically or pessimistically that if one is serious about changing status or income position of blacks, one would do better than to place one's bet on school changes to accomplish this. This interpretation goes too far in the other direction by discounting important elements of autonomous power and influence possessed by school systems, especially as they affect their young clients in the primary school years. It likewise disregards the importance of schooling in vocational preparation, despite the trend in employment opportunities requiring more and more years of schooling as entry credentials.

A final assumption is that contact brings benefits to both parties who have been separated -- but especially to the party who is separated against his will. The argument for contact between ethnic groups is expressed in two parts: 1) contact will lessen prejudice, enhance self-esteem and increase assimilation; and 2) contact will increase productivity which for public schools means largely school achievement.

1) In the social psychology literature on prejudice one can certainly find studies which suggest prejudice-reducing effects of contact among adults -- for example, in housing projects and in the armed forces -- and among children in play groups. Other studies can be cited which suggest the reverse: that contact increases prejudice and heightens intergroup tension. The evidence for the effects of ending the separation of black and white school children -- much of it methodologically inadequate -- points in both directions. Some studies show no difference; others show less tension, enhanced self-concept among blacks and increased tolerance. The most useful theories about the effects of contact in lessening prejudice are conditional, and have been tested so far only with adult populations. For example, Allport suggests that contact will lessen prejudices among ethnic groups, at least in some limited sphere, whenever there is substantial equality, when the realization of common goals is involved, when groups depend upon one another for success, and when authorities, customs or laws support the ethic of tolerance. We do not have comparably refined theories concerning conditions enhancing positive contact among children. Equally important but unknown are the effects of parents' and teachers' attitudes on children in such situations.

Given the inconclusiveness of scientific evidence, we must rely on our judgment. One senses that the separation of ethnic groups must lead to fantasies and incorrect beliefs which will not equip children with the necessary sensitivity and knowledge to engage in realistic dealings with ethnically different adults later on. Separation makes it that much easier to regard people of different color, religion or ethnic background as strangers and hence as less human. Yet we are also aware that among children or adults contact is no guarantee that vicious manifestations of prejudice will not arise. The roots of prejudice lie not only in unfamiliarity with strangers but in historical events, religion, economics, politics and personality.

2) The social science evidence on the effects of contact in increasing productivity are equally inconclusive. In public schools, it has been argued that black children not separated from whites will score better on achievement tests and will obtain better grades and reach higher levels of attainment. The Coleman report has been quoted to support both the proponents and opponents of this position. Studies of busing and other desegregation experiments likewise provide inconclusive results. Several of the studies are methodologically weak. As we said earlier: "Desegregation as a strategy to raise black achievement has not been given an adequate test. The results of existing research are no basis on which to abandon the strategy as fruitless."

Three major assumptions underlying attempts to end the separation of black from white children in public schools have been identified: the melting pot ideology; the belief that public schools have a central role in the assimilation of ethnically different groups and thus serve as a vehicle for social change; and the efficacy of contact. In recent years all three have been questioned, denied in public discussion and modified by scholars. A more precise and reasonable set of assumptions have emerged: while ethnic distinctiveness still persists, the assimilation of ethnic groups has proceeded remarkably quickly in producing important economic, social and political participation -- with the distinct major exception of black Americans. While schools alone have not been responsible for this change, they have served as a powerful force in vocational preparation and assimilation of white ethnic groups. While contact does not inevitably lead to benefits in terms of increased producity and decreased prejudice, under certain conditions it does so for adults. It is beyond the scope of this paper to suggest from the evidence exactly how contact should be brought about by schools in order to achieve the same kind of assimilation and integration which has occurred among white ethnic groups. Yet the evidence is clear enough to contradict those who claim that increased contact will inevitably produce tensions or that schools need play no significant role. It is equally certain that over-reliance on a strategy of ending the separation of races through school integration will not be enough to ensure upward mobility of black Americans.

What does seem clear is the following:

1. There is an obvious and important federal interest in avoiding the structuring of our society into a system of belligerent subsocieties. There are far too many examples around the world to show that this can happen.

2. It has been traditional to view schools as agencies which, together with the family and media, bring children towards some common set of beliefs and mores, and some principled understanding of an American political system.

3. One can look in two ways at the principles of political justice, political negotiation, and fair play in the schools. One can hold that the schools, by creating a certain atmosphere, basically establish the contract of the political community in adult life. In this view the schools are very potent instruments of political development. One can also take the view that schools are fairly passive, that they reflect what is acceptable to the very large community to which they are accountable, and that the correction of political problems fundamentally takes place outside schools while being reflected in them.

4. No one has ever deliberately sat down and planned the political socialization process in our schools, and it distinctly repugnant to think

of this being done. To Americans, one of the sure evidences of a totalitarian society is the deliberate, willful construction of political brainwashing in the schools. It makes no difference that you can argue that political values of our society are sold in our own schools. The difference is between willful and circumstantial manipulation of children, between one human being taking power over others, and circumstances having power. This difference seems like a small difference to some, but perhaps it is a very large one.

5) We are able, finally, to offer no significant recommendations about the question of the building of a political community through schools. It seemed worthwhile to discuss the question, even though we were unable to make a recommendation. It is not clear to us that any solution to the problem should be imposed by planning at a federal level, for obvious reasons. Perhaps, however, this is the kind of issue that might benefit from public discussion. Once we had a widespread image of the function of the schools in the "melting pot" of American society. Perhaps we have not gone completely beyond the melting pot, or, perhaps, there is some other vital and healthful public image of our cohesiveness that might emerge and be helpful in the shaping of the schools.

Can we find some way to remain competitive as a society without crushing competitiveness within?
Where and how can we assert "quality of life" issues for families and their children?

As one works up a report such as this, one repeatedly encounters social science terms like 'SES', 'achievement', 'income', 'ethnicity', 'occupational prestige', etc. If one reads around the indices, the flavor of the human feelings that surround such terms becomes clear. The human feelings connected with winning and losing, being in or out, all have to do with things like tension, anxiety, feelings of degradation, low "self-concept", and beliefs that circumstances are out of one's control. Writings such as that of Robert Coles, in his "Children of Crisis" series, seem absolutely necessary for some kind of human perspective on the problems that we stereotype with numbers. There is no denial of the simple fact that some among us need more resources than we have. But the experience of a shortage of resources is not so much an economic fact. What causes the trouble is the psychological experience, and the major issue in the construction of social programs may not be simply to balance resources but to balance that which comes to humans from resources, feelings of dignity and worth. Nobody has a very good "operational definition" of what we mean by quality of life in our society. But, from the perspective of the individual, the issues we discussed in a study, like this have to do most directly with quality of life.

During the course of this study, we have gone over the evidence on the effects of amphetamines on children's performance in the early grades of school. The evidence is fairly good to suggest that amphetamines are effective in increasing the achievement of the child in school. Nevertheless, we refrain from embodying recommendations about such drugs in our planning of the earlier chapters. One reason, significant in itself, was that we did not feel we had the competence to make judgments which are fundamentally medical judgments about the risks involved in drug administration to children -- particularly a program of emphasis on drug administration not spontaneously sought by the children themselves. But a second major reason had to do with "quality of life" issue. There are frequent charges that not just a few Americans, but that a great majority of Americans now sustain themselves by drugs -- if we extend drugs to properly include tobacco, caffein, alcohol, and tranquilizers. Recognizing this, it still goes against the grain to extend to children the same privileges of survival in society that are now extended to adults. The action of amphetamines on the child are by no means worked out, but a respectable case can be made that amphetamines serve not a "paradoxical" function of quieting children, but a direct tranquilizing function which is effectively like that of adults. The major difference seems to be that while some adults need to reduce arousal level in order to achieve an optimum of cognitive efficiency, it is the case with some children that they need to increase arousal to reach that level.

There is good reason to believe that children are acutely sensitive to the competitiveness that lies within the public school classroom. It is really rather hard to "kid" children. They become aware within the environment of the classroom that some children are good in school and some are bad, and it is quite likely that this has an effect on them. Some hold that this effect is tantamount to the "self-concept" of the child, and that public school programs that concentrate on "mental health" can sustain the child's self-concept. While there is no question that a school can and should be run with an extreme of tact and sensitivity to children, the whole question of the challenge of the school to the child and its ability to ameliorate that challenge seems to us to be only diluted by the steps that are usually offered. In the body of the recommendations, we have offered as a recommendation the diversification of public education, in some large part because we feel that the competitiveness of the school classroom which arrives at a single-strand hierarchy running from winners to losers is unreal and unwarranted. It is an unrealistic reflection of the life beyond the classroom, in which we gradually find out that there are many ways to be viable as a human being even though one is not necessarily "school smart". "Mental health" steps that somehow try to bury the competitiveness of a single-strand ladder of prestige only seem to offer palliatives. It is dubious that children are totally disintegrated by schools, as it is dubious that children are totally integrated by schools. Children have a rich, important life outside the classroom. A child finds out that he is not good at school. He may then resent the school; he may "turn off" while in it, and hate the time he spends there. But he assimilates his feelings about school to a larger self-picture in which he forms some notion of who he is, and where he is competent and where he is not.

Do we need as much competitiveness as we have in the schools? It seems reasonably clear that it puts some children under considerable strain and tension. Some say we do. The general argument is a Darwinian argument about the survival of the fittest. All societies have prestige ladders. All have winners and losers. You tune up a society, and you gear it for excellence by putting strain on people to bring out "their best". There are Darwinisms and Darwinisms. We do not have to look at human capacity as simply a capacity for individual survival in nature. The essence of survival and competition may not be individual survival at all. It may be that group of individuals -- that "species" -- which is strongest as a group that best perpetuates the survival of its members. One can construct a Darwinian rhetoric that says it is innate in human behavior to find ways to be cohesive together, to cooperate, to control aggression, and to try to find the means of facing the world under the principles of group cohesiveness. Looking at that sort of Darwinism, it is argued that we can achieve excellence as a society better by reducing crushing competitiveness and by maintaining some essence of tranquility and viability for all children within the school environment.

## Child Welfare Issues

The tasks of planning with regard to child welfare issues are much more concrete than are the sorts of questions posed by the social issues, but they are hardly less complex.

Those problems of children that are real problems must be reached by services that are individualized, relevant, comprehensive and coordinated. The experience of the last half-dozen years suggests that this is not likely to be achieved by the imposition of new programs with a mission of comprehensiveness on a historic bed of old programs. How then, is comprehensiveness to be achieved?

The recommendations made in this report will, we feel, take some near-term steps toward the goal of public responsiveness to the real problems of children. We can only project here certain general guiding considerations of a longer and larger movement toward that goal.

1. One step in the process must be to understand more completely what the present spectrum of federal services for children are. We have reported, in Appendix IIIC, the outcome of an attempt to cross-index and cross-tabulate the functions of existing federal programs for children in order to understand their coverage. We were unable to estimate real, as opposed to authorized, services now being delivered to children. We were unable to get an exact picture of resources given to children. We were unable to get a picture of numbers of children being served. That information could be obtained.

2. Another step in the process must be to understand better the numbers of children now requiring service. We have presented some of the existing statistics in Appendix IIIA, but only some of those numbers seem very trustworthy. Better numbers could be obtained.

3. A third step in the process, probably, would take place through community studies in which some attempt was made to make estimates through sampling of services and their coverage as against the distribution of children's needs that are relevant to services.

4. With information like the above, the beginnings of a solution might be attempted. The difficult part of bringing about coordination would reside in this. At present, the federal level seems to have taken major responsibility among the public systems for research, for conceptualization, for development of services to meet needs. Yet the solution that must be achieved must embody finally local management, local guidance, and local accountability.

5. Probably, full and flexible coverage of the various needs of children should be achieved by development of the service elements that are now most widely in place and most widely in contact with children -- health services and schools.

6. If we can manage to extend to all children the benefits of prenatal and perinatal care, as has been suggested in this report, then a basis exists for universal screening of all children, not only for health and handicap, but also for family problems. This would certainly be true if, in appropriate areas, health services were equipped with meaningful outreach capability.

7. If health services provided a screening and family assistance function in the age range from 0-3 -- the age range in which health services are most critical for children, and in which the middle-class family now makes its most frequent visits to the pediatrician -- then selected work with children might then be assumed by special extensions of public school services downwards to age three. The public schools would offer not preschools, but specialized preschool services such as those outlined in our recommendation for the diversification of Head Start, offered in Chapter 12. These special services, in turn, would be reasonably integrated with the special services that schools now provide when children reach school-entering age. The schools would, in effect, reach out to certain special children and their families before the normal entering age of school, and would offer special services that might or might not require continuation after the child entered regular school.

8. The great advantage of this possible scheme would be its relative simplicity. Children's problems would be handled by two major services, with family assistance functions as an integral part of both. However, this simple kind of solution -- which is by no means a novelty of this report -- faces formidable problems in the institution of management, guidance and accountability.

9. Service programs for children cannot be managed at a distance. We are now so limited in our ability to evaluate programs that we cannot expect that quality control can be maintained by numbers and indices shipped to a distant control point.

10. Service programs for children cannot be managed by present professional accountabilities nor, so far we yet can see, by accountability to parent advisory groups. Theoretically, a professional service worker can be accountable simply because of his desire to keep credentials; but the child care professions are either changing or uncertain professions, as noted above. Theoretically, parent advisory groups might hold service programs to their goals, but there is little certain evidence yet that they can.

11. Probably, the fundamental innovation needed for a solution to the development of effective services is an innovation at the management and accountability level -- perhaps (with the movement of the tax base for schools away from local taxes) a shift from local elected School Committees toward local elected Child Care Committees; perhaps the kinds of half-professional-half-parent appointed child welfare committees that are now being tried in one or two states.

## Bibliography: Part III

Adelman, H. S., & Feshbach, S. Predicting reading failure: Beyond the readiness model. *Exceptional Children*, 1971, 37(5), 349-354.

Alexander Graham Bell Association for the Deaf, Inc. *The very young hearing-impaired child*. Washington, D. C.: Author, 1967. (ERIC No. ED 021 388)

Angoff, W. H., Scales, Norms, and Equivalent Scores. In R. L. Thorndike (Ed.), *Educational Measurement*, American Council on Education, Washington, D. C., 1971, 508-600.

Allen, W. H. Instructional media research: Past, present and future. *Audio-Visual Communications Review*, 1971, *29*, 5-18.

Alpert, J. J., Heagarty, M. C., Robertson, L., Kosa, J., & Haggerty, R. J. Effective use of comprehensive pediatric care: Utilization of health resources. *American Journal of Diseases of Children*, 1968, 116, 529-33.

American Academy of Pediatrics. *Lengthening shadows: A report of the council on pediatric practice of the American Academy of Pediatrics on the delivery of health care to children, 1970*. Evanston, Illinois: The Academy, 1971.

Ames, L. B. Children with perceptual problems may also lag developmentally. *Journal of Learning Disabilities*, 1969, *4*, 205. (b)

Ames, L. B. Prevention of learning problems better than cure. *Journal of Learning Disabilities*, 1969, *2*, 45. (a)

Averch, H. A., Carroll, S. J., Donaldson, T. S., Kiesling, H. J., & Pincus, J. *How effective is schooling? A critical review and synthesis of research findings*. Santa Monica, California: The Rand Corporation, 1971. (b)

Averch, H., Carroll, S., & Donaldson, T. What do we know about educational effectiveness? A working note prepared for The President's Commission on School Finance. Santa Monica, California: Rand Corporation, 1971. (a)

Babbidge, H. D. *Education of the deaf: A report to the Secretary of Health, Education, and Welfare by his Advisory Committee on the Education of the Deaf*. Washington, D. C.: U. S. Department of Health, Education, and Welfare, 1965.

Barker, R. G. *Ecological psychology*. Stanford: Stanford University Press, 1968.

Barraga, N. C. The child with limited but useful vision: A perspective. Paper presented at Biennial Conference of the American Association of Instructors of the Blind, Salt Lake City, 1966. (ERIC No. ED 015 605)

Bar-Yam, Miriam. *The interaction of instructional strategies with student characteristics*. Cambridge, Mass.: Center for Research and Development on Educational Differences, Harvard University, 1969.

Barbrack, C., & Horton, P. *Educational intervention in the home and paraprofessional career development: A second generation mother study with an emphasis on costs and benefits*. Vol. 4, #4 DARCEE Papers & Reports. John F. Kennedy Center for Research on Education & Human Development, George Peabody College for Teachers, Nashville, Tennessee, 1970

Becker, W. C., & Krug, R. S. Parent attitude research instrument: A research review. *Child Development*, 1965, *36*, 329-365.

Behling, J. H. An experimental study to measure the effectiveness of casework service. Unpublished doctoral dissertation, Ohio State University, 1961.

Bell, L. I., & Wilder, L. Family functioning in multi-problem families in area development project. *Research Monograph No. 3*. Vancouver, B. C.: Area Development Project, 1969.

Beloff, J. S., Snokes, P. S., & Weinerman, E. R. Yale studies in family health care: II. Organization of a comprehensive family health care program. *Journal of the American Medical Association*, 1968, *204*, 355-60.

Beloff, J. S., & Weinerman, E. R. Yale studies in family health care: I. Planning and pilot test of a new program. *Journal of the American Medical Association*, 1967, *199*, 383-389.

Beloff, J. S., & Willet, M. Yale studies in family health care: III. The family care team. *Journal of the American Medical Association*, 1968, *205*, 663-669.

Bereiter, C. An academic preschool for disadvantaged children: Conclusions from evaluation studies. In J. C. Stanley (Ed.), *Preschool programs for the disadvantaged: Five experimental approaches to early childhood education*. Baltimore: Johns Hopkins University Press, 1972.

Bereiter, C. Designing programs for classroom use. In F. F. Korten et al. (Eds.), *Psychology and the problems of society*. Washington, D. C.: American Psychological Association, 1970.

Bereiter, C. Schools without education. *Harvard Educational Review*, in press.

Bereiter, C., & Engelmann, S. An academically oriented preschool for disadvantaged children: Results from the initial experimental group. In D. W. Brison & J. Hill (Eds.), *Psychology and Early Childhood Education*. Toronto: The OISE Monograph Series, No. 4, 1968.

Bereiter, C., & Engelmann, S. *Teaching disadvantaged children in the preschool*. Englewood Cliffs, N. J.: Prentice Hall, 1966.

Bergman, T. *Children in the hospital*. New York: International University Press, 1965.

Bernbaum, M. Early childhood programs for non-English speaking children. Urbana, Ill.: University of Illinois College of Education Curriculum Laboratory, 1971.

Berry, J. W. Temne and Eskimo perceptual skills. *International Journal of Psychology*, 1966, *1*, 207-229.

Bijou, S. W. *Research in remedial guidance of young retarded children with behavior problems which interfere with academic learning and adjustment*. Washington, D. C.: Office of Education, 1968. (ERIC No. ED 024 196)

Bilsky, L. Evaluation of a specialized nursery school program for emotionally disturbed children. New York: Columbia University, 1970. (ERIC No. ED 046 197)

Binet, A. *Les idées modernes sur les enfants*. Paris: Flammarion, 1909.

Binet, A., & Henri, V. La psychologie individuelle. *Année psychologique*, 1896, *2*, 411-465.

Birch, H. G. Research issues in child health: A Head Start research seminar. IV. Some philosophic and methodologic issues. *Pediatrics*, 1970, *45*, 874-883.

Birch, H. G., & Gussow, J. D. *Disadvantaged children: Health, nutrition and school failure*. New York: Harcourt, Brace and World, 1970.

Bissell, J. The cognitive effects of preschool programs for disadvantaged children. Unpublished doctoral dissertation, Harvard Graduate School of Education, Cambridge, 1970.

Bissell, J. S. *Implementation of Planned Variation in Head Start, I. Review and summary of The Stanford Research Institute Interim Report: First year evaluation*. Prepared for the Office of Child Development, U. S. Department of Health, Education and Welfare, 1971.

Blade, M., & Watson, W. S. Increase in spatial visualization test scores during engineering study. *Psychology Monographs*, 1955, *69*(12, Whole No. 397).

Blatt, B. Massachusetts study of educational opportunities for handicapped and disadvantaged children. Boston: Massachusetts Advisory Council on Education, 1971.

Blatt, B., & Garfunkel, F. The educability of intelligence and preschool intervention with disadvantaged children. Washington, D. C.: The Council for Exceptional Children, Inc., 1969.

Bloom, B. L. The "medical model," miasma theory, and community mental health. Community Mental Health Journal, 1965, 1, 333-38.

Bloom, B. Stability and change in human characteristics. New York: John Wiley and Sons, 1964.

Bloom, R. S. Testing cognitive ability and achievement. In N. L. Gage (Ed.), Handbook of research on teaching. Chicago: Rand McNally, 1963.

Bourne, P. G. What day care ought to be. The New Republic, February 12, 1972, 18-23.

Bowlby, J. Maternal care and mental health. Geneva: World Health Organization (Monograph Series #2), 1951.

Boyd, J. L. Project Head Start Summer 1966. Final report. Princeton, N. J.: Educational Testing Service, 1966.

Brandt, A. The use of the therapeutic nursery school in the treatment of the emotionally disturbed preschool child. Unpublished Master's Thesis, The Catholic University of America, 1967.

Breslow, L. Some essentials in a national program for child health. Pediatrics, 1969, 44, 327-332.

Bricker, D., & Bricker, W. Toddler research and intervention project report, year 1. Nashville, Tennessee: Institute on Mental Retardation and Intellectual Development, 1971. (ERIC No. ED 059 559)

Brim, O. G., Jr. Education for child rearing. New York: Free Press, 1965.

Brinkmann, E. H. Programmed instruction as a technique for improving spatial visualization. Journal of Applied Psychology, 1966, 50, 179-184.

British Columbia School Trustees Association. Class Size and Pupil-Teacher Ratio: An Annotated Bibliography. Vancouver: BCTA, 1971.

Brown, C. (Ed.) The multi-problem dilemma: A social research demonstration with multi-problem families. Metuchen, N. J.: Scarecrow Press, 1968.

Brown, C. E., Briller, S., & Richards, S. S. A new program for young blind children -- a cornerstone for future service. New Outlook for the Blind, 1967, 61(7), 210-217.

Bureau of Education for the Handicapped. *Better education for the handicapped: Annual report: FY 1968.* Washington, D. C.: U. S. Government Printing Office, 1969.

Bureau of Education for the Handicapped. *Better education for the handicapped: Annual report: FY 1969.* Washington, D. C.: U. S. Government Printing Office, 1970.

Bureau of Education for the Handicapped. *Handicapped Children's Early Education Program: Program description.* Washington, D. C.: U. S. Department of Health, Education and Welfare, 1971.

Bushell, D. *The behavior analysis classroom.* Lawrence, Kansas: University of Kansas, Department of Human Development, 1970.

Caldwell, B. The rationale for early intervention. *Exceptional Children*, 1970, *36*, 717-726.

Calvert, D. R., & Baltzer, S. Home management in a comprehensive preschool program for hearing impaired children. *Exceptional Children*, 1967, *12*, 253-258.

Calvert, D. R., Reddell, R. C., Jacobs, H., & Baltzer, S. Experiences with preschool deaf-blind children. *Exceptional Children*, 1972, *38*(5), 415-421.

Cattell, R. B. *Abilities: Their structure, growth, and action.* Boston: Houghton Mifflin, 1971.

Center for Community Research. *Report on preliminary impact data from a national survey of the Parent-Child Center Program.* Prepared for Office of Child Development, U. S. Department of Health, Education and Welfare, Contract No. 2997A/H/O, 1972.

The Center for Educational Policy Research. *The effects of Title I, ESEA: An exploratory study.* Graduate School of Education, Harvard University, 1971.

Cervenka, E. *Administrative manual for tests of basic language competence in English and Spanish: Level I (preschool): Children ages three to six, English and Spanish versions.* Froms A and B Part of final report, 1968. (ERIC No. ED 027 063)

Chapman, J. E., & Lazar, J. B. *The present status and future needs in day care research.* Washington, D. C.: Office of Child Development, Department of Health, Education and Welfare, Grant # OCD CB 107, 1971.

Child Health Care Policy Task Force. *Summary report of the Task Force.* Prepared for the Office of Child Development, U. S. Department of Health, Education and Welfare, April 7, 1972.

Child Welfare League of America, Inc. *Standards for day care service.* New York City: Author, 1969.

Child Welfare League of America, Inc. *Standards for homemaker service for children.* New York City: Author, 1959.

Children's Bureau, U. S. Department of Health, Education and Welfare, and Day Care and Child Development Countil of America. *Standards and costs for day care.* Washington: Government Printing Office, 1968.

Chu, G. C., & Schramm, W. *Learning from television.* Palo Alto: Stanford University Institute for Communications Research, 1967.

Cicirelli, V. G., et al. *The impact of Head Start: An evaluation of the effects of Head Start on children's cognitive and affective development.* (Westinghouse Learning Corporation and Ohio University. Contract b89-4536 with the Office of Economic Opportunity) Washington, D. C.: Office of Economic Opportunity, 1969.

Cohen, D. *Social accounting in education: Reflections on supply and demand.* Cambridge, Ma.: The Center for Educational Policy Research, Reprint No. 33, Harvard Graduate School of Education, 1970.

Coleman, J., et al. *Equality of educational opportunity.* U. S. Department of Health, Education and Welfare, Office of Education, OE-38001, National Center for Educational Statistics. Washington, D. C.: U. S. Government Printing Office, 1966.

Connor, L. E. Early intervention. *Volta Review*, 1971, *73*(5), 270-271.

Cooke, R. E. Statement for the Ad Hoc Task Force on Poverty, Committee on Education and Labor, Hearings on HR 513, 1969, pp. 1122ff.

Cronbach, L. J. The logic of experiments on discovery. In L. S. Shulman & E. R. Keisler (Eds.), *Learning by discovery: A critical appraisal.* Skokie, Ill.: Rand McNally & Company, 1966.

Cronbach, J., & Snow, R. E. Final Report: *Individual differences in learning ability as a function of instructional variables.* Palo Alto: Stanford University, 1969.

Danwalder, D. D. *Education, training, and employment of the blind.* Pittsburgh: Western Pennsylvania School for the Blind, 1964.

Dave, R. H. The identification and measurement of environmental process variables that are related to educational achievement. Unpublished doctoral dissertation, University of Chicago, 1963.

Day Care Study Group. *Alternative federal day care strategies for the 1970's: Summary report*. U. S. Office of Economic Opportunity Contract #1300-5121. Minneapolis: Institute for Interdisciplinary Studies, 1972.

DeCecco, J. P. Class size and coordinated instruction. *British Journal of Educational Psychology*, 1964, *34*, 265-274.

DeFries, Z., Jenkins, S., & Williams, E. C. Foster family care for disturbed children -- a nonsentimental view. *Child Welfare*, 1965, *44*, pp. 73-84.

DeHirsch, K., Jansk, J. J., & Langford, W. S. *Predicting the failing reader*. New York: Harper & Row, Inc., 1966.

Denhoff, E., Hainsworth, P., & Hainsworth, M. Learning disabilities and early childhood education: An information-processing approach. In H. R. Myklebust (Ed.), *Progress in learning disabilities*. Vol. II. London: Grune & Stratton, Inc., 1971.

Deutsch, M. Minority group and class status as related to social and personality factors in scholastic achievement. The Society for Applied Anthropology, *Monograph No. 2*. Ithaca, N. Y.: Cornell University, 1960.

Dickinson, R. M. How shall we serve our visually handicapped preschool children? Paper presented at the Biennial Conference of the American Association of Instructors of the Blind, Salt Lake City, 1966.

DiLorenzo, L., Salter, R., & Brady, J. J. *Prekindergarten programs for educationally disadvantaged children*. Final report. Washington, D. C.: U. S. Office of Education, 1969. (ERIC No. ED 038 460)

Dimock, G. H. *The child in hospital: A study of his emotional and social well being*. Philadelphia: F. A. Davis, 1960.

Dingle, J. H., Badger, G. F., & Jordan, W. S. *Illness in the home: A study of 25,000 illnesses in a group of Cleveland families*. Cleveland: Western Reserve University Press, 1964.

Domas, S., & Tiedeman, D. Teacher competence. An annotated bibliography. *Journal of Experimental Education*, 1950, *19*, 1-218.

Donabedian, A. An evaluation of prepaid group practice. *Inquiry*, 1969, *6*(3), 3-27.

Douglas, J. W. B. Mental ability and school achievement of premature children at eight years of age. *British Medical Journal*, 1956, 1, 1210-1214

Drescher, R. Head Start Parents Adult Basic Education Project, New York City. Final Report. Washington, D. C.: U. S. Office of Education, Division of Adult Education, 1968. (ERIC No. ED 018 761)

Drillien, C. M. *The growth and development of the prematurely born infant.* Baltimore: Williams and Wilkins, 1964.

Duncanson, J. P. *Intelligence and the ability to learn.* Princeton, N. J.: Educational Testing Service, 1964.

Eisner, V. Effect of parents in the home on juvenile delinquency. *Public Health Reports*, 1966, *81*, 905-910.

Eisner, V., & Oglesby, A. Health assessment of school children: I. Physical examinations. *Journal of School Health*, 1971, *5*, 239-242.

Ekstrom, R. B. *Experimental studies of homogeneous grouping.* Princeton, New Jersey: Educational Testing Service, 1959.

Elias, M. Behavioral consequences of malnutrition in infancy: A review of human studies. Unpublished paper, Department of Nutrition, School of Public Health, Harvard University, 1971.

Emlen, A. C., Donoghue, B. A., & LaForge, R. *Child care by kith.* Washington, D. C.: Children's Bureau, Department of Health, Education and Welfare, 1971.

Engelmann, S. The effectiveness of direct instruction on IQ performance and achievement in reading and arithmetic. In J. Hellmuth (Ed.), *Disadvantaged Child*, Vol. 3. New York: Brunner/Mazel, 1970.

Erickson, E. L., McMillan, J., Bennell, J., Hoffman, L., & Callahan, O. D. *Experiments in Head Start and early education curriculum structures and teacher attitudes.* Washington, D. C.: U. S. Office of Economic Opportunity, 1969.

Eysenck, H. J. The effects of psychotherapy: An evaluation. *Journal of Consulting Psychology*, 1952, *16*, 319-24.

Ferguson, T. *The young delinquent in his social setting.* Oxford: Oxford University Press, 1952.

Fleming, C. M. Class size as a variable in the teaching situation. *Educational Research*, 1959, *1*, 35-48.

Fomon, L. *Prevention of iron-deficiency anemia in infants and children of preschool age.* Public Health Service Publication #2085. Washington, D. C.: U. S. Government Printing Office, 1970.

Fomon, L., & Weckworth, V. E. Hemoglobin concentrations of children registered for care in C & Y projects during March and April 1968. Unpublished manuscript, Minneapolis: Systems Development Project, 1971.

Ford, L. C., & Silver, H. K. The expanded role of the nurse in child care. *Nursing Outlook*, 1967, *15*, 43.

Forssman, H., & Thurve, I. One hundred twenty children born after application for therapeutic abortion refused. *Acta Psychiat. Scand.*, 1966, *42*, 71.

Fouracre, M. H., et al. *The effects of a preschool program upon young educable mentally retarded children: Vol. 1.* New York: Columbia University, 1962. (ERIC No. ED 002 797)

Fraiberg, S. Parallel and divergent patterns in blind and signted infants. *The Psychoanalytic Study of the Child*, 1968, *23*, 264-299.

Frandsen, A. N., & Holder, J. R. Spatial visualization in solving complex verbal problems. *Journal of Psychology*, 1969, *73*, 229-233.

Furman, R. A., & Katan, A. (Eds.), *The therapeutic nursery school: A contribution to the study and treatment of emotional disturbances in young children.* New York: International Universities Press, Inc., 1969.

Gage, N. L. (Ed.). *Handbook of research on teaching*, Chicago: Rand McNally, 1963.

Gallagher, J. J. Statement before the Select Sub-Committee on Education of the Committee on Education and Labor. U. S. House of Representatives, July 16, 1968. (ERIC No. ED 023 245)

Gans, H. J. *The urban villagers.* New York: The Free Press of Glencoe, 1962.

Garvue, Flanagan, & Castine. *The National School Food Service and Nutrition Education Finance Project* Special Study No. 8, National Education Finance Project. Washington, D. C.: U. S. Department of Agriculture, 1971.

Geismar, L. Implications of a family life improvement project. *Social Casework*, 1971, *52*, 455-465.

Geismar, L., Gerhart, U., & Lagay, B. The Rutgers University family life improvement project. Unpublished manuscript, Rutgers University Graduate School of Social Work, 1970.

Geismar, L., & Krisberg, J. *The forgotten neighborhood: Site of an early skirmish in the war on poverty.* Metuchen, N. J.: The Scarecrow Press, 1967.

Ghiselli, E. E., & Brown, C. W. Validity of aptitude tests for predicting trainability of workers. Personnel Psychology, 1951, 4, 243-260.

Gil, D. G. Violence against children. Cambridge: Harvard University Press, 1970.

Gilmer, B., Miller, J. O., & Gray, S. W. Intervention with mothers and young children: A study of infra-family effects. Nashville, Tennessee: DARCEE Papers and Reports, Vol. 4, No. 11., George Peabody College for Teachers, 1970.

Gintis, H. Education and the characteristics of worker productivity. The American Economic Review, 1971, 61, 266-279.

Glaser, R., & Nitko, A. J. Measurement in Learning and Instruction. In R. L. Thorndike (Ed.), Educational Measurement, American Council on Education, Washington, D. C., 1970.

Glueck, S., & Glueck, E. T. Family environment and delinquency. Boston: Houghton Mifflin, 1962.

Goldberg, M. L., Justman, J., & Passow, A. H. The effects of ability grouping. New York: Horace Mann-Lincoln Institute of School Experimentation, Teachers College, 1966.

Goldstein, A. P. Domains and dilemmas. International Journal of Psychiatry, 1969, 7(3), 128-134.

Gordon, E. W. Compensatory education: Evaluation in perspective. IRCD Bulletin, 1970, 6, 2-5.

Gordon, E. W. Utilizing Available Information from Compensatory Education and Surveys. Final Report. Washington, D. C.: Office of Education, 1971.

Gordon, I. J. Early child stimulation through parent education. Gainesville: University of Florida College of Education, Institute for Development of Human Resources, 1969. (ERIC No. ED 038 166)

Gotkin, L. G., & McSweeney. Learning from teaching machines. In P. C. Lang (Ed.), Programmed instruction. Chicago: University of Chicago Press, 1967.

Gray, S. W. Home visiting programs for parents of young children. Paper presented at the meeting of the National Association for the Education of Young Children, Boston, 1970.

Gray, S. W., & Klaus, R. A. The early training project: A 7th year report. Child Development, 1970, 41(4).

Greenburg, I. G., & Rodburg, M. L. The role of prepaid group practice in relieving the medical care crisis. *Harvard Law Review*, 1971, 84, 887-1001.

Griffiths, C. *Conquering childhood deafness: A new technique for overcoming hearing problems in infants and children.* New York: Exposition Press, Inc., 1967. (ERIC No. ED 016 343)

Guilford, J. P. *The nature of human intelligence*. New York: McGraw-Hill, 1967.

Guilford, J. P. Three faces of intellect. *American Psychologist*, 1959, *14*, 469-479.

Gutelius, M. F. The problem of iron deficiency anemia in preschool Negro children. *American Journal of Public Health*, 1969, *59*, 290-295.

Haggerty, R. J. Family medicine: A teaching program for medical students and pediatric house officers. *Journal of Medical Education*, 1962, *37*, 531-580.

Haggerty, R. J. Present strengths and weaknesses in current systems of comprehensive health services for children and youth. *American Journal of Public Health*, 1970, *60*, 74-98. (a)

Haggerty, R. J. Research issues in child health: A Head Start research seminar. II. Some medical and economic issues. *Pediatrics*, 1970, *45*, 702-712. (b)

Haggerty, R. J., & Alpert, J. J. The child, his family, and illness. *Postgraduate Medicine*, 1963, *34*, 228-233.

Hall, G. R., Carpenter, P., Haggart, S. A., Rapp, M. L., & Sumner, G. C. *A guide to educational performance contracting*. Prepared for the Department of Health, Education, and Welfare. Santa Monica, Calif.: Rand Corporation, 1972.

Halliday, C. Findings and implications of experimental teaching in visual stimulation. *Biennial Conference of the American Association of Instructors of the Blind*. Washington, D. C.: BCAAIB, 1966.

Hanley, E. M. Review of research involving applied behavior analysis in the classroom. *Review of Educational Research*, 1970, *40*, 597-625.

Harley, R. K. A review of recent literature on the multi-handicapped child and related areas. Paper presented at the Biennial Conference of the American Association of Instructors of the Blind, Salt Lake City, 1966. (ERIC No. ED 015 605)

Harris, G. M. The young hearing-impaired child. In Alexander Graham Bell Association for the Deaf, Inc. *The very young hearing-impaired child.* Washington, D. C.: Alexander Graham Bell Association for the Deaf, Inc., 1967.

Hawkridge, D. G., Campeau, P. L., DeWitt, K. M., & Trickett, P. K. *A study of further exemplary programs for the education of disadvantaged children.* Final report to the Office of Education. Palo Alto, California: American Institutes of Research, 1969. (ERIC No. ED 036 668)

Hawkridge, D. G., Chalupsky, A. G., & Roberts, A. H. *A study of selected exemplary programs for the education of disadvantaged children.* Palo Alto: American Institutes for Research, September 1968.

Heller, B., & Barrett, R. *Expand dn improve . . . a critical review of the first three years of ESEA Title I in New York City.* New York: The Center for Urban Education, 1970.

Herzog, E., & Sudia, C. E. *Boys in fatherless families.* Washington, D. C.: U. S. Government Printing Office, #19700-385-852, 1970.

Hess, R. D., Shipman, V. C., Brophy, J. E., & Bear, R. M. *The cognitive environments of urban preschool children.* Chicago: Graduate School of Education, University of Chicago, 1968.

Holden, R. H. A review of psychological studies in cerebral palsy: 1947-1952. *American Journal of Mental Deficiency*, 1952, 57.

Holmes, D. Carrier, B., & Holmes, M. *Report on preliminary impact data from a national survey of the parent-child center program.* New York City: Center for Community Research, 1972.

Holt, J. *What do I do on Monday.* New York: E. P. Dutton & Company, 1970.

Hopkins, T. W., Bice, H. V., & Colton, K. C. *Evaluation and education of the cerebral palsied child.* Arlington, Va.: International Council for Exceptional Children, 1954.

*Hunger, U. S. A.* A report by the citizens' board of inquiry into hunger and malnutrition in the United States. Washington, D. C.: New Community Press, 1968.

Hunt, J. McV. *Intelligence and experience.* New York: Ronald Press, 1961.

Husan, J. *International Study of Achievement in Mathematics.* Vols. I & II. New York: Wiley, 1967.

Illich, Ivan. *Deschooling society.* New York: Harper & Row, 1971.

Illingsworth, R. *The development of the infant and young child, normal and abnormal.* Baltimore, Md.: William and Wilkins, 1960.

Illsley, R. Early prediction of perinatal risk. *Proceedings of the Royal Society of Medicine*, 1966, *59*, 181-184.

Jacobsen, R. F., & Siegel, E. Comprehensive health planning in the space age: The role of the school health program. *Journal of School Health*, March 1971, 156-160.

Jencks, C. S. The Coleman Report and the conventional wisdom. In F. Mosteller & D. P. Moynihan (Eds.), 1972.

Jencks, C. S. *Inequality: A reassessment of the effect of family and schooling in America*. New York: Basic Books, 1972 (in press).

Jenkins, S., & Sauber, M. *Paths to child placement*. New York: Community Council of New York, 1966.

Johnston, P. W. Factors associated with deafness in young children. *Massachusetts Department of Public Health Reports*, 1967, *82*(11).

Jones, M. V. (Ed.), *Special education programs within the United States*. Springfield, Ill.: Charles C. Thomas, 1968.

Jones, R. Labels and stigma in special education. *Exceptional Children*, 1972, *38*, 553-564.

Jordan, T. E. Longitudinal study of preschool development. *Exceptional Children*, 1971, *37*(7), 509-512.

Kagan, J., & Kogan, N. Individuality and cognitive performance. In P. Mussen (Ed.), *Manual of child psychology*. New York: Wiley, 1970.

Kagan, J., Moss, H. A., & Sigel, I. E. Psychological significance of styles of conceptualization. In J. C. Wright & [illegible] Kagan (Eds.), Basic cognitive processes in children. *Monograph of Society for Research in Child Development*, 1963, *28*(2), 73-112.

Karnes, M. B. The evaluation and implications of research with young handicapped and low-income children at the Institute for Research on Exceptional Children at the University of Illinois. Unpublished paper. Urbana, Ill., 1972(?).

Karnes, M. B. *A quarter of a century of research with young handicapped and low-income children at the Institute for Research on Exceptional Children at the University of Illinois*. Urbana: University of Illinois, 1972(?).

Karnes, M. B., Hodgins, A. S., & Teska, J. A. The effects of five preschool interventions: Evaluations over two years. In M. B. Karnes, A. S. Hodgins, J. Teska, & S. A. Kirk, *Research and development program on preschool disadvantaged children*. Final report to the U. S. Department of Health, Education and Welfare. Vol. 1. May 1969. (a)

Karnes, M. B., Hodgins, A. S., & Teska, J. A. A follow-up of three of the five preschool interventions: Evaluations over three years. In M. B. Karnes, A. S. Hodgins, J. A. Teska, & S. A. Kirk, Research and development program on preschool disadvantaged children. Final report to the U. S. Department of Health, Education, and Welfare. Vol. 1. May 1969. (b)

Karnes, M. B., Teska, J. A., Hodgins, A. S., & Badger, E. D. Educational intervention at home by mothers of disadvantaged infants. Child Development, 1970, 41, 925-935.

Kasl, S. V. Poverty and health status. Paper prepared for the Ambulatory Health Care for the Poor Study Team, Georgetown University and OASPE, July 1972.

Keister, M. A demonstration project: Group care of infants and toddlers, Final report. Children's Bureau, U. S. Department of Health, Education and Welfare, Grant # D-256, Washington, D. C., 1970.

Keogh, B. K. A compensatory model for psychoeducational evaluation of children with learning disorders. Journal of Learning Disabilities, 1971, 4(10), 5-9.

Keyserling, M. D. Windows on day care. New York City: National Council of Jewish Women, 1972.

Kirk, S. A. Early education of the mentally retarded. Urbana: University of Illinois Press, 1958.

Kirk, S. A. Educating exceptional children. (2nd ed.) Boston: Houghton Mifflin Company, 1972.

Kirk, S. A. The effects of early education with disadvantaged infants. In M. B. Karnes, A. S. Hodgins, J. A. Teska, & S. A. Kirk, Research and development program on preschool disadvantaged children. Final report to the U. S. Office of Education, Bureau of Research, DHEW, 1, Washington, D. C., May 1969. (ERIC No. ED 036 663)

Kirschner Associates Inc. A national survey of the impacts of Head Start centers on community institutions. Project Head Start, Office of Child Development, U. S. Department of Health, Education and Welfare, May 1970. (a)

Kirschner Associates Inc. A national survey of the parent-child center program. United States Department of Health, Education and Welfare, 1970. (b)

Klarman, H. E. Effect of prepaid group practice on hospital use. Public Health Reports, 1963, 78, 955-965.

Klaus, R. A., & Gray, S. W. The early training project for disadvantaged children: A report after five years. Monograph of the Society for Research in Child Development, 1968, 33(4, Serial No. 120).

Kleisinger, G. The value of a parent operated preschool center to personnel in the preventive health field. Canadian Journal of Public Health, 1971, 62, 23-26.

Kraft, I., & Chilman, C. S. Helping low-income families through parent education. Washington, D. C.: U. S. Department of Health, Education and Welfare, Social and Rehabilitation Service, Children's Bureau, 1966.

Kühl, P. H. The family center project -- Action research on socially deprived families. Copenhagen: The Danish National Institute of Social Research, 1969.

LaVor, M., & Krivit, D. Law review: The Handicapped Children's Early Education Assistance Act, Public Law 90-538. Exceptional Children, 1969, 35(5), 379-383.

Lerner, M. Current status of the health of the poor and relevant policy considerations. Paper prepared for the Ambulatory Health Care for the Poor Study Team, Georgetown University and OASPE, 1972.

Lesser, G. S., Fifer, G., & Clark, D. H. Mental abilities of children from different social-class and cultural groups. Monographs of the Society for Research in Child Development, 1965, 30(No.4).

Levenstein, P. Cognitive growth in preschoolers through verbal interaction with mothers. American Journal of Orthopsychiatry, 40(3), April 1970.

Levenstein, P. Mothers as early cognitive trainers. Paper read at Biennial Meeting, Society for Research in Child Development, April 2, 1971. (a)

Levenstein, P. Verbal interaction program. Final report. Children's Bureau, U. S. Department of Health, Education and Welfare, February 1971. (b)

Levinson, P. Southern city study. Social and Rehabilitation Service. Unpublished data, U. S. Department of Health, Education and Welfare, 1968.

Lewis, H. Culture, class and the behavior of low income families. In Culture, class and poverty, Washington, D. C., Cross-Tell, 1967.

Liebow, E. Tally's corner. Boston: Little, Brown, 1967.

Lively, V. The kindergarten teacher and the exceptional child. Elementary School Journal, 1965, 66(3), 143-147.

Lowe, C. U. The role of government in implementing good nutritional practice. Bulletin of the New York Academy of Medicine, 1971, 47, 647-56.

Lundstrom, K. The organization and methods of educational work for deaf children at preschool age. In Alexander Graham Bell Association for the Deaf, Inc. The very young hearing-impaired child. Washington, D. C.: AGBAD, Inc., 1967.

Luterman, D. M. A parent-centered nursery program for preschool deaf children. Boston: Emerson College, 1967. (ERIC No. ED 026 772)

Luterman, D. M. A parent-oriented nursery program for preschool deaf children: A follow-up study. Volta Review, 1971, 73(2), 106-112.

Lynch, E. D., & Kinard, C. Models for day care licensing. Seattle: CONSERCO, 1972.

Maloney, E. Philosophy and goals of a preschool program. Paper presented at the Biennial Conference of the American Association of Instructors of the Blind, Salt Lake City, 1966. (ERIC No. ED 015 605)

Marklund, S. Scholastic attainments as related to size and homogeneity of classes. Educational Research, 1963, 6(1), 63-67.

Marland, S. P., Jr. Career education -- more than a name. Paper presented at the annual meeting of the State Directors of Vocational Education, Washington, D. C., May 1971. (a)

Marland, S. P., Jr. New patterns in higher education. Paper presented at Minnesota Metropolitan State College, St. Paul, Minnesota, May 1971. (b)

Martin, E. W. Bureau of Education for the Handicapped commitment and programs in early childhood education. Exceptional Children, 1971, 37(9), 661.

Massachusetts Early Education Project. Child care in Massachusetts: The public responsibility. A study for the Massachusetts Advisory Coundil on Education. Cambridge: Harvard University, Program in Public Psychology, 1972.

Maternal and Child Health Care Programs: Program Analysis. U. S. Department of Health, Education and Welfare, Washington, D. C., 1966.

McAnarney, E., Nadar, P. R., Coleman, R. F., Goldstein, S., & Friedman, S. B. The pediatrician in an innovative public school health program: One future focus for pediatrics. Clinical Pediatrics, 1971, 10, 86-89.

McConnell, F. (Ed.), Conference on current practices in management of deaf infants, 0-3 years. Proceedings. Nashville, Tenn.: Bill Wilkerson Hearing and Speech Center, Vanderbilt University, 1968.

McCord, J., McCord, W., & Thurber, E. Some effects of paternal absence on male children. Journal of Abnormal and Social Psychology, 1962, 64, 361-369.

McCord, W., & McCord, J., & Zola, I. K. Origins of crime: A new evaluation of the Cambridge-Somerville Youth Study. New York: Columbia University Press, 1959.

McDermott, W., Deuschle, K. W., & Barnett, C. R. Health care experiment at Many Farms. Science, 1972, 175, 23-31.

McDonald, A. D. Intelligence in children of very low birth-weight. British Journal of Preventive and Social Medicine, 1964, 18, 59-74.

McKeown, T. Medicine in modern society: Medical planning based on evaluation of medical achievement. London: G. Allen and Unwin, 1965.

McLaughlin, M. Parent involvement in compensatory education programs: A review. Unpublished qualifying paper, Harvard Graduate School of Education, May 7, 1971.

McLaughlin, M., Bussard, R., Smith, M., & Cohen, D. The effects of Title I, ESEA: An exploratory study. Cambridge: The Center for Educational Policy Research, Harvard Graduate School of Education, December 30, 1971.

Mendelsohn, H., et al., Operation Gap-Stop. Final report. Denver: University of Colorado, 1968. (ERIC No. ED 024 788)

Meyer, H. J., Borgatta, E. P., & Jones, W. C. Girls at vocational high: An experiment in social work intervention. New York: Russell Sage Foundation, 1965.

Meyer, R. J., Roelefs, H. A., Bluestone, J., & Redmond, S. Accidental injury to the preschool child. Journal of Pediatrics, 1963, 63, 95.

Meyers, C. E., Dingman, H. F., Orpet, R. E., Sitkei, E. G., & Watts, C. A. Four ability-factor hypotheses at three preliterate levels in normal and retarded children. Monograph of the Society for Research in Child Development, 1964, 29, No. 5.

Meyers, C. E., Orpet, R. E., Atwell, A. A., & Dingman, H. F. Primary abilities at mental age six. Monograph of the Society for Research in Child Development, 1962, 27, Whole No. 82.

Michael, W. B., Guilford, J. P., Fruchter, B., & Zimmerman, W. S. The description of spatial-visualization abilities. Educational and Psychological Measurement, 1957, 17, 185-199.

Miller, L. B., & Dyer, J. L. *Experimental variation of Head Start curricula. A comparison of current approaches. Annual progress report, June 1, 1969 - May 31, 1970.* Louisville, Ky.: University of Louisville, Department of Psychology, 1970.

Miller, L. B., & Dyer, J. L. *Experimental variation of Head Start curricula: A comparison of current approaches.* Progress Report No. 7, June 1970 - October 1970. Submitted to the Office of Economic Opportunity, Child Development Laboratory, University of Louisville, Louisville, Kentucky, 1970.

Miller, L. B., et al. *Experimental variation of Head Start curricula: A comparison of current approaches.* Progress Report, No. 9, March 1, 1971 - May 31, 1971, Louisville, Kentucky: University of Louisville, Department of Psychology, 1971.

Minnesota Research Systems, Inc. *Summary analysis of present and future met and unmet health needs of children.* Report prepared for HEW Child Health Care Policy Task Force, February 1972.

Minuchin, S., Montalvo, D., Guerney, B. G., Rosman, B. L., & Schumer, F. *Families of the Slums.* Boston: Little, Brown & Company, 1967.

Moor, P. M. *A blind child, too, can go to nursery school.* New York: American Foundation for the Blind, 1962.

Moor, P. M. Service to multiply impaired children. Paper presented at the Biennial Conference of the American Association of Instructors of the Blind, Salt Lake City, 1966. (ERIC No. ED 015 605)

Morris, J. *Standards and progress in reading.* Sussex: King, Thorne & Stare, 1966.

Mullen, E., Chazin, R., & Feldstein, D. *Preventing chronic welfare dependency: An evaluation of public-private collaborative intervention with first time public assistance families.* New York: Community Service Society, 1970.

National Advisory Commission on Health Manpower. *Report of the Commission.* Washington, D. C.: U. S. Government Printing Office, 1967, 2 vols.

Nay, J. N., Vogt, L. M., & Wholey, J. S. *Health Start: Interim Analysis and Report.* Working Paper No. 961-2. Washington, D. C.: The Urban Institute, January 3, 1972.

Newberger, E. H., Hass, G., & Mulford, R. M. *Child abuse in Massachusetts: Incidence, current mechanisms for intervention, and recommendations for effective control.* Draft report of the Governor's Committee on Child Abuse, 1971.

Northcott, W. N. Candidate for integration: A hearing-impaired child in a regular nursery school. *Young Children*, 1970, *25*, 367-381.

Northcott, W. N. Infant education and home training. In L. Connor (Ed.), *Speech for the deaf child: Knowledge and use*. Washington, D. C.: Alexander Graham Bell Association for the Deaf, 1971.

Nye, F. I. *Family relationships and delinquent behavior*. New York: John Wiley and Sons, 1958.

Office of Economic Opportunity. Report prepared for the Office of Economic Opportunity by the Planning Committee of Project Head Start, February 1965.

Ogilvie, D. G. *Employer subsidized day care*. Washington, D. C.: Inner City Fund, 1972.

Oppenheimer, S. Early identification of mildly retarded children. *American Journal of Orthopsychiatry*. 1965, *35*, 845-851.

Ora, J. P. The involvement and training of parent -- and citizen -- workers in early education for the handicapped and their implications: A working paper for the Council on Exceptional Children, Invisible College on Early Childhood, Tennessee Department of Mental Health, 1972.

Paige, D. M. School feeding program: Who should receive what? *Journal of School Health*, May 1971, 261-63. (a)

Paige, D. M. The school lunch program: An underachiever. Paper presented at Convention of American School Health Association, October 1971. (b)

Pappenfort, D. M., & Kilpatrick, D. M. *A Census of Children's Residential Institutions in the United States, Puerto Rico, and the Virgin Islands, 1966. Volume 1: Seven Types of Institutions*. Chicago: The School of Social Service Administration, The University of Chicago, 1970.

Parker, R. K., & Day, M. C. Comparisons of preschool curricula. In R. K. Parker (Ed.), *The preschool in action: Exploring early childhood programs*. Boston: Allyn & Bacon, Inc., 1972.

Patterson, P. K., et al. Parent reaction to the concept of pediatric assistants. *Pediatrics*, 1969, *44*, 69-96.

Pavenstedt, E. *The drifters*. Boston: Little, Brown, 1967.

Payne, S. Where handicapped mix with the rest. *Times Educational Supplement*, 1969, 2812.

Peaker, G. F. The Regression Analysis of the National Survey. In *Children and Their Primary Schools*, Vol. 2, Appendix 4. London: Central Advisory Council for Education, 1967.

Perlman, H. H. Casework and the case of Chemung County. In G. Brown (Ed.), The multiproblem dilemma. Metuchen, N. J.: The Scarecrow Press, Inc., 1968.

Perrott, G. S., & Chase, J. C. The Federal Employees Health Benefits Program. Group Health and Welfare News, Special Supplement, 1968.

Peterson, M. L. The first year in Columbia: Assessment of low hospitalization rate and high office use. Johns Hopkins Journal of Medicine, 1971, 128, 15-23.

Popham, W. J., & Husek, T. R. Implications of criterion-referenced testing. Journal of Educational Measurement, 1969, 6(1), 1-9.

Powers, E., & Witmer, H. An experiment in the prevention of delinquency: The Cambridge-Somerville youth study. New York: Columbia University Press, 1951.

Pritchard, M. C., Horan, K. M., & Hollingworth, L. S. The course of mental development in slow learners under an experience curriculum. In 39th Yearbook, National Society for the Study of Education, 1940, Part II. Bloomington: Public School Publishing Company, 1940.

Rainwater, L. The problem of lower-class culture and poverty-war strategy. In D. P. Moynihan (Ed.), On understanding poverty: Perspectives from the social sciences. New York: Basic Books, Inc., 1969.

Read, M. S. The biological bases: Malnutrition and behavioral development. 1972 National Society for the Study of Education yearbook on early childhood education. In press.

Report on Preschool Education. Vol. 4(3). Washington, D. C.: Capitol Publications, Inc., April 1972, 10.

Rhodes, W. C. A community participation analysis of emotional disturbance. Exceptional Children, 1970, 36(5), 309-317.

Riessman, F., Cohen, J., & Pearl, A. Mental Health of the Poor. New York: Free Press, 1964.

Risley, T. Spontaneous language and the preschool. In J. C. Stanley (Ed.), Preschool programs for the disadvantaged. Baltimore: The Johns Hopkins University Press, 1972.

Rolfe, J. F. The measurement of teaching ability: Study Number Two. Journal of Experimental Education, 1945, 14, 52-74.

Rosenshine, B. Evaluation of Instruction. Review of Educational Research, 40, 1970, 279-300.

Rosenshine, B. The stability of teacher effects upon student achievement. *Review of Educational Research*, 1971, *40*, 647-662.

Rosenshine, B., & Furst, J. Current and Future Research on Teacher Performance Criteria. In B. W. Smith (Ed.), *Research on Teacher Education: A Symposium*. Englewood Cliffs, N. J.: Prentice-Hall, 1971.

Rosteker, L. E. The measurement of teaching ability: Study Number One. *Journal of Experimental Education*, 1945, 14, 6-51.

Rowe, M. P. *Economics of child care: Testimony before the U. S. Senate Finance Committee, 23 September 1971*. Cambridge, Mass.: Abt Associates, 1971.

Rutter, M., Tizard, J., & Whitmore, K. (Eds.), *Education, health and behaviour: Psychological and medical study of child development.* New York: John Wiley & Sons, Inc., 1970.

Saettler, P. *A history of instructional technology*. New York: McGraw Hill, 1968.

St. John, N. Thirty-six teachers: Their characteristics, and outcomes for black and white pupils. Cambridge, Mass.: Harvard Graduate School of Education, 1970.

Sarason, S. B., Levine, L., Goldenberg, I. I., Cherlin, D. L., & Bennett, E. M. *Psychology in Community Settings: Clinical, educational, vocational, social aspects*. New York: John Wiley & Sons, Inc., 1966.

Savitz, R. A. *Vision screening for the preschool child*. Boston: Harvard School of Public Health, 1964. (ERIC No. ED 012 120)

Saward, E. W., Blank, J. D., & Greenlick, M. R. Documentation of twenty years of operation and growth of a prepaid group practice plan. *Medical Care*, 1968, *6*, 251-244.

Schaefer, E. S. Parents as educators: Evidence from cross-sectional, longitudinal and intervention research. In W. Hartup (Ed.). *The young child: Reviews of research*. Washington, D. C.: National Association for the Education of Young Children, 1972.

Schaefer, E., & Aaronson, M. Infant education research project: Implementation and implications of a home tutoring project. In R. Parker (Ed.), *The pre-school in action: Exploring early childhood programs*. Boston: Allyn and Bacon, 1972.

Schelling, T. C. On the ecology of micromotives. *Public Interest*, 1971, No. 25, 61-98.

Schultze, C. L., Fried, E. R., Rivlin, A. M., & Teeters, N. H. *Setting national priorities: The 1973 budget*. Washington, D. C.: The Brookings Institution, 1972.

Schwartz, E. E., & Sample, W. C. First findings from midway. *Social Service Review*, 1967, *41*, 113-151.

Segal, J. A. *Food for the hungry: The reluctant society*. Baltimore: The Johns Hopkins University Press, 1970.

Sennet, E. I. A negative learning froce becomes a positive teaching tool. *Teaching Exceptional Children*, 1970, *2*, 2.

Shaeffer, H. R., & Callender, W. M. Psychological effects of hospitalization in infancy. *Pediatrics*, 1959, *24*, 528-39.

Shipman, V. C. *Structure and development of cognitive competencies and styles prior to school entry, ETS-Head Start longitudinal study*. Princeton, N. J.: Educational Testing Service, 1971.

Shore, M. F. (Ed.) *"Red is the color of hurting": Planning for children in the hospital*. Bethesda, Maryland: National Institute of Mental Health, 1967.

Silberman, C. E. *Crisis in the classroom: The remaking of American education*. New York: Random House, 1970.

Silver, G. A. *Family Medical Care*: A report on the Family Health Maintenance Demonstration. Cambridge, Mass.: Harvard University Press, 1963.

Silver, H. K., Ford, L. C., & Day, L. R. The pediatric nurse-practitioner *Journal of the American Medical Association*, 1968, *204*, 298-302.

Simmons, A. A. Language growth for the pre-nursery deaf children. *Volta Review*, 1966, *68*, 201-205.

Simulmatics Corporation. *The evaluation of Project ENABLE*. Cambridge, Mass.: Author, 1967. (ERIC No. ED 023 008)

Skeels, H. M., & Dye, H. B. A study of the effects of differential stimulation on mentally retarded children. *Procedural Address of the American Association for Mental Deficiency*, 1939, 44, 114-136.

Slocum, W. L., & Stone, C. L. Family culture patterns and delinquent type behavior. *Marriage and Family Living*, 1963, *25*, 202-208.

Smith, H. A. Curriculum development and instructional materials. *Review of Educational Research*, 1969, *39*, 397-414.

Smith, I. M. *Spatial ability: Its educational and social significance.* London: University of London Press, 1964.

Smith, M., & Bissell, J.* Report analysis: The impact of Head Start. *Harvard Educational Review*, 1970, *40*, 51-104.

Snyder, B. R. *The Hidden Curriculum*. New York: Knopf, 1971.

Somers, H. M., & Somers, A. R. *Doctors, patients, and health insurance: The organization and financing of medical care*. Washington, D. C.: The Brookings Institution, 1961.

Spearman, C. *The abilities of man*. New York: Macmillan, 1927.

Spindler, P. G., & Low, S. *Child care arrangements of working mothers in the United States*. Children's Bureau Publication # 46-1968. Washington: Government Printing Office, 1969.

Spitz, R. A. Hospitalism: An inquiry into the genesis of psychiatric conditions in early childhood. In O. Fenichel et al., (Eds.), *Psychoanalytic study of the child*. Vol. 1. New York: International Universities Press, 1945.

Sprigle, H. A. *The Learning to Learn program*. Jacksonville, Fla.: Learning to Learn, n.d.

Stake, R. E. Learning parameters, aptitudes, and achievements. *Psychometric Monographs*, 1961 (Whole No.9).

Starfield, B., & Sharp, E. Medical problems, medical care, and school performance. *Journal of School Health*, April 1971, 184-187.

Stead, E. A., Jr. Conserving costly talents: Providing physicians with new assistants. *Journal of the American Medical Association*, 1966, *198*, 182.

Stearns, M. S. *Report on preschool programs: The effects of preschool programs on disadvantaged children and their families*. Washington, D. C.: Office of Child Development, 1971.

Steffire, B., & Matheny, K. Counseling theory. In R. L. Ebel (Ed.), *Encyclopedia of educational research*. (4th Ed.) New York: Macmillan, 1969.

Stephens, J. M. The process of schooling: A psychological examination. New York: Holt, Rinehart & Winston, 1967.

Stevenson, H. W., Hale, G. A., Klein, R. E., & Miller, L. K. Interrelations and correlates in children's learning and problem solving. *Monographs of the Society for Research in Child Development*, 1968, *33* (Whole No. 7).

Stevenson, H. W., & Odom, R. D. Interrelationships in children's learning. Child Development, 1965, 36, 7-19.

Strupp, H. H., & Bergin, A. Z. Some empirical and conceptual bases for coordinating research in psychotherapy. International Psychiatry, 1969, 7, 18-90.

Stufflebeam, D. I. Educational evaluation and decision making. Itasca, Ill.: F. E. Peacock, 1971.

Szymanska, R., & Powlowski, Z. Possibilities of early rehabilitation of the small deaf child in the home environment and with the guidance of audiologic-rehabilitation centre. In Alexander Graham Bell Association for the Deaf, Inc. The very young hearing-impaired child. Washington, D. C.: AGBAD, Inc., 1967.

Tabler, K. A., Hixson, E. E., & Collins, E. F. Elementary and secondary school characteristics. Analytic Note Number 81, Washington, D. C.: National Center for Educational Statistics, Office of Education, 1968.

Talbot, N., & Howell, M. Social and behavioral causes and consequences of disease among children. In N. Talbot, J. Kagan, & L. Eisenberg (Eds.), Behavioral science in pediatric medicine. Philadelphia: W. B. Saunders, 1971.

Talbot, N., Kagen, J., & Eisenberg, L. (Eds.) Behavioral science in pediatric medicine. Philadelphia: W. B. Saunders, 1971.

Task Force on Children Out of School. The way we go to school: The exclusion of children in Boston. Boston: Beacon Press, 1971.

Taylor, E. C. Out of the classroom. Exceptional Children, 1969, 36(4), 273-276.

Thurstone, L. L., & Thurstone, T. G. SRA Primary Mental Abilities technical supplement. Chicago: Science Research, 1954.

Treganza, A., et al. Vision screening programs: Preschool and school age. San Diego: San Diego County Optometric Society, n.d. (ERIC No. ED 016 328)

Tropp, R. Untitled. Forthcoming report on the demand for and supply of day care, 1972.

Truax, C. G., & Carkhuff, R. R. Toward effective counseling and psychotherapy. Chicago: Aldine, 1967.

U. S. Bureau of the Census. Marital status and family status, March 1970. Current Population Reports, Series P-20, No. 212. Washington: Government Printing Office, 1971a.

U. S. Bureau of the Census. *Statistical abstract of the United States, 1971*. Washington: Government Printing Office, 1971b.

U. S. Department of Health, Education and Welfare. *The effectiveness of compensatory education: Summary and review of the evidence*. Washington, D. C.: Author, 1972.

U. S. Department of Health, Education and Welfare. Marland on career education. In *American Education*, Office of Education, OE No. 72-52, November 1971.

U. S. Department of Health, Education and Welfare, National Center for Social Statistics. *Findings of the 1971 AFDC study*. NCSS Report #AFDC-1(71). Washington: Government Printing Office, 1971.

U. S. Department of Labor. *The work incentive program*. Second Annual Report of the Department of Labor to the Congress on Training and Employment under Title IV of the Social Security Act, June 1971.

U. S. Employment Service. *Estimates of worker trait requirements for 4,000 jobs*. Washington, D. C.: U. S. Government Printing Office, 1957.

U. S. Office of Management and Budget. *The budget of the United States Government, 1973*. Washington: Government Printing Office, 1972.

U. S. Office of Management and Budget. *Special analyses, Budget of the United States 1973*. Washington: U. S. Government Printing Office, 1972.

Unger, B. K. New directions for nurseries. *Young Children*, 1968, *24*, 1.

Varwig, R. Social considerations in the case of the preschool hearing handicapped child. *Volta Review*, 1965, *15*(4).

Vernon, M. Prematurity and deafness: The magnitude and nature of the problem among deaf children. *Exceptional Children*, 1967, 289-298. (a)

Vernon, M. Rh factor and deafness: The problem, its psychological, physical and educational manifestations. *Exceptional Children*, 1967, 5-12. (b)

Wagner, M. G. Research issues in child health: A Head Start research seminar. III. Some socio-anthropologic and organizational issues. *Pediatrics*, 1970, *45*, 868-873.

Wargo, M. J., Campeau, P. L., & Tallmadge, G. K. *Further examination of exemplary programs for educating disadvantaged children*. Final Report. Palo Alto: American Institutes for Research in the Behavioral Sciences, 1971.

Weber, G. Inner-city children can be taught to read: four successful schools. Occasional Papers No. 18. New York: Council for Basic Education, 1971.

Weider, D., & Hicks, J. Evaluation of an early intervention program for neurologically impaired children and their families. New York: United Cerebral Palsy of Queens, Inc., n.d. (ERIC No. ED 050 533)

Weikart, D. P. A comparative study of three preschool curricula. A paper presented at the biennial meeting of the Society for Research in Child Development, Santa Monica, California, March 1969.

Weikart, D. P. Early childhood special education for intellectually subnormal and/or culturally different children. Ypsilanti, Mich.: High/Scope Educational Research Foundation, 1971. (Originally a paper presented at the National Leadership Institute in Early Childhood Development, Washington, D. C., October 1971)

Weikart, D. P. Preschool intervention. Ann Arbor, Michigan: Campus Publication, 1967.

Weikart, D. P. Relationship of curriculum, teaching and learning in preschool education. In J. C. Stanley (Ed.), Preschool programs for the disadvantaged. Baltimore: The Johns Hopkins University Press, 1972.

Weikart, D. P., Deloria, D. J., Lawser, S. A., & Wiegerink, R. Longitudinal results of the Ypsilanti Perry Preschool Project. Final report to U. S. Department of Health, Education and Welfare, Office of Education, Bureau of Research, August 1970. (ERIC No. ED 044 536)

Weintraub, F. Testimony before Select Subcommittee on Education of the Committee on Education and Labor, House, 92nd Congress, N. R. 6748 & related bill, Comprehensive Child Development Act of 1971. May-June 1971, 158-171.

Welch, W. W. Curriculum evaluation. Review of Educational Research, 1969, 39, 429-444.

Werner, E. E., Bierman, J. M., & French, F. E. The children of Kauai: A longitudinal study from the perinatal period to age ten. Honolulu: University of Hawaii Press, 1971.

Westburn, I. Curriculum evaluation. Review of Educational Research, 1970, 40, 239-260.

Westinghouse Learning Corporation. The impact of Head Start, an evaluation of the effect of Head Start on children's cognitive and affective development. Vol. I, Text and Appendices A-I. Ohio University Report to OEO, Clearinghouse for Federal Scientific and Technical Information, 1969.

Westinghouse Learning Corporation, & Westat Research, Inc. Day care survey -- 1970. Washington, D. C.: U. S. Office of Economic Opportunity, Contract # BOO-5160, 1971.

White, S. H. The national impact study of Head Start. In J. Hellmuth (Ed.), Disadvantaged child, Volume 3: Compensatory education, a national debate. New York: Brunner/Mazel, Inc., 1970.

White House Conference on Children 1970. Profiles of children. Washington, D. C.: U. S. Government Printing Office, 1970.

Willie, C. V. The relative contribution of family status and economic status in juvenile delinquency. Social Problems, 1967, 14, 326-334.

Wilson, A. B. Educational consequences of segregation in a California community. Appendix C-3, Racial Isolation in the Public Schools. Washington, D. C.: U. S. Commission on Civil Rights, 1967, 165-206.

Wilson, R. An evaluation of intensive casework impact. Public Welfare, 1967, 25, 301-306.

Wing, C. W., Jr., & Wallach, M. A. College admissions and the psychology of talent. New York: Holt, Rinehart & Winston, Inc., 1971.

Wise, H. B., Torrey, E. F., et al. The family health worker. American Journal of Public Health, 1968, 58, 1828-38.

Witkin, H. A., Dyk, R. B., Faterson, H. F., Goodenough, D. R., & Karp, S. A. Psychological differentiation. New York: Wiley, 1962.

Witkin, H. A., Goodenough, D. R., & Karp, S. A. Stability of cognitive style from childhood to young adulthood. Journal of Personality and Social Psychology, 1967, 7, 291-300.

Witkin, H. A., Lewis, H. B., Hertzman, M., Machover, K., Meissner, P. B., & Wapner, S. Personality through perception. New York: Harper, 1954.

Woods, M. B. The unsupervised child of the working mother. Developmental Psychology, 1972, 6(1), 14-25.

Woolsey, S. Nutritional status of children. Unpublished paper prepared for the Office of Management and Budget, October 1971.

Yankauer, A., Connelly, J. P., & Feldman, J. J. A survey of allied health worker utilization in pediatric practice in Massachusetts and in the United States. Pediatrics, 1968, 42, 733-742.

Yerby, A. S. The disadvantaged and health care. American Journal of Public Health, 1966, 56, 5-9.

Young, D. L. *Analysis of the National School Lunch Programs and Child Nutrition Needs*. Publication No. 705-51. Washington, D. C.: The Urban Institute, March 1971.

Zigler, E. Contemporary concerns in early childhood education. *Young Children*, 1971, *26*, 141-156.

# Appendix IIIA

## Numbers of Disadvantaged Children

In the following tables are estimates indicating the number of children in each of the five categories of disadvantage identified in Chapter 1: income, ethnicity, family weakness, crisis, and equity. Although the criteria used to define each category represent major forms of disadvantage, it is not *ipso facto* true that all children so identified are to be considered candidates for public support programs. On the other hand, many children who are disadvantaged under several criteria have been counted several times.

The accuracy of the estimates varies widely for several reasons. First, disagreements in definition -- such as changing standards of nutritional needs, or differing opinions regarding what constitutes child "abuse" or "neglect" -- lead to differing figures. Second, although some of the categories match data collected by the Bureau of the Census (and thus are relatively reliable figures), the majority are estimated only by extrapolating from results obtained by surveying sample populations. Often these sample populations are small and of questionable representativeness of the nation as a whole. Third, estimates are occasionally made on the basis of numbers served by existing programs, which in many cases either fail to reach many people in need or are utilized unnecessarily by others -- leading to unpredictable biases. Granting these caveats, the tables are suggestive of the known incidence of the five aspects of disadvantage.

Notes

-- Where there is reason to doubt the validity of precise figures, they have been rounded to the nearest 100,000 or 1,000,000; therefore subtotals may not sum exactly to totals.

-- For categories where data on the 0 to 9 age range are not available, and for which it is unlikely the rate of incidence for 0 to 9 is homogeneous across the range for which data are available (e.g., the utilization of psychiatric facilities), we have included estimates for the available age grouping (usually 0 to 18).

-- In those tables giving Bureau of the Census data the following definitions apply:

> *Family*. The term "family" . . . refers to a group of two or more persons related by blood, marriage, or adoption and residing together; all such persons are considered as members of the same family. Thus, if the son of the head of the household and the son's wife are in the household, they are treated as part of the head's family. On the other hand, a lodger and his wife not related to the

head of the household or an unrelated servant and his wife are considered as additional families, and not a part of the household head's family

Head of family. One person in each family was designated as the head. The head of a family is usually the person regarded as the head by members of the family. Women are not classified as heads if their husbands are resident members of the family at the time of the survey. Married couples related to the head of a family are included in the head's family and are not classified as separate families.

Size of family. The term "size of family" refers to the number of persons who are living together and are related to each other by blood, marriage, or adoption.

Own children and related children. "Own" children in a family are sons and daughters, including stepchildren and adopted children, of the family head. "Related" children in a family include own children and all other children in the household who are related to the family head by blood, marriage, or adoption.

Farm-nonfarm residence. The farm population refers to rural residents living on farms. The territory classified as urban is the same as that in the 1960 census; all other territory is classified as rural. The method of determining farm-nonfarm residence in the Current Population Surveys since March 1960 is the same as that used in the 1960 census, but differs from that used in earlier surveys and censuses. By current definition, the farm population consists of all persons living in rural territory on places of less than 10 acres yielding agricultural products which sold for $250 or more in the previous year, or on places of 10 acres or more yielding agricultural products which sold for $50 or more in the previous year. Rural persons in institutions, motels, and tourist camps, and those living on rented places where no land is used for farming, are not classified as farm population. The non-farm population, as the term is used here, comprises persons living in urban areas and rural persons not on farms.

Metropolitan-nonmetropolitan residence. The population residing in standard metropolitan statistical areas (SMSA's) constitutes the metropolitan population. Except in New England, an SMSA is a county or group of contiguous counties which contains at least one city of 50,000 inhabitants or more, or "twin cities" which a combined population of at least 50,000. In addition to the county, or counties, containing such a city or cities, contiguous counties are included in an SMSA if, according to certain criteria, they are essentially metropolitan in character and are socially and economically integrated with the central city.

In New England, SMSA's consist of towns and cities, rather than counties. The metropolitan population is based on SMSA's as defined in the 1960 census, and does not include any subsequent additions or changes.

The metropolitan population is further classified as "in central cities" and "outside central cities." With a few exceptions, central cities are determined according to the following criteria:

1. The largest city in an SMSA is always a central city.

2. One or two additional cities may be secondary central cities if they have at least 250,000 inhabitants or if the additional city or cities each have a population of one-third or more of that of the largest city and a minimum population of 25,000.

Income. For each person in the sample 14 years old and over, questions were asked on the amount of money income received in the preceding calendar year from each of the following sources: (1) Money wages or salary; (2) net income from nonfarm self-employment; (3) net income from farm self-employment; (4) Social Security; (5) dividends, interest (on savings or bonds), income from estates or trusts, or net rental income; (6) public assistance or welfare payments; (7) unemployment compensation, government employee pensions, or veterans' payments; (8) private pensions, annuities, alimony, regular contributions from persons not living in this household, and other periodic income.

The amounts received represent income before deducations for personal taxes, Social Security, bonds, etc. When an indefinite amount was reported by the respondent, a specific value was assigned during processing wherever possible. If the indefinite amount was reported in terms of a range, the midpoint of the range was assigned (i.e., $10,000 to $15,000 was coded as $12,500). Open-ended amounts were converted to designated specific amounts; e.g., over $10,000 was coded as $15,000.

The following Table i gives the Bureau of the Census definition of "low-income" level used in this appendix.

TABLE i

Weighted Average Thresholds at the Low-Income Level in 1970
by Size of Family and Sex of Head, by Farm-Nonfarm Residence

| Size of family | Total | Nonfarm |  |  | Farm |  |  |
|---|---|---|---|---|---|---|---|
|  |  | Total | Male head[1] | Female head[1] | Total | Male head[1] | Female head[1] |
| All unrelated individuals | $1,947 | $1,954 | $2,044 | $1,898 | $1,651 | $1,697 | $1,602 |
| Under 65 years | 2,005 | 2,010 | 2,092 | 1,935 | 1,727 | 1,778 | 1,644 |
| 66 years and over | 1,852 | 1,861 | 1,879 | 1,855 | 1,586 | 1,597 | 1,576 |
| All families | 3,580 | 3,601 | 3,640 | 3,305 | 3,147 | 3,164 | 2,845 |
| 2 persons | 2,507 | 2,525 | 2,534 | 2,471 | 2,131 | 2,138 | 2,036 |
| Head under 65 years | 2,569 | 2,604 | 2,619 | 2,522 | 2,218 | 2,225 | 2,104 |
| Head 65 years and over | 2,328 | 2,348 | 2,349 | 2,336 | 1,994 | 1,996 | 1,972 |
| 3 persons | 3,080 | 3,099 | 3,133 | 3,003 | 2,628 | 2,635 | 2,511 |
| 4 persons | 3,944 | 3,968 | 3,970 | 3,948 | 3,385 | 3,387 | 3,345 |
| 5 persons | 4,654 | 4,680 | 4,684 | 4,639 | 4,000 | 4,002 | 3,963 |
| 6 persons | 5,212 | 5,260 | 5,263 | 5,220 | 4,490 | 4,491 | 4,441 |
| 7 or more persons | 6,407 | 6,468 | 6,486 | 6,317 | 5,518 | 5,521 | 5,472 |

[1] For unrelated individuals, sex of the individual.

Source: U.S. Bureau of the Census, Current Population Reports, Series P-60, #81.

Income

Two indices are given for this category: (1) numbers of persons on families below the poverty and "near-poverty" income levels; and (2) recipients of public assistance under Aid to Families with Dependent Children (AFDC).

TABLE IA

Number of Persons in Families Below the Poverty Level and Near-poverty Level

| | All | Below Poverty Level (less than $4,000 for a family of 4, nonfarm residence) | | Below "Near-poverty" Level (less than $5,000 for a family of 4, nonfarm residence) |
|---|---|---|---|---|
| Population (thousands) | | | | |
| All | 187,000,000 | 20,500,000 | | 29,500,000 |
| Male Head | 169,000,000 | 12,900,000 | | 20,200,000 |
| Female Head | 20,000,000 | 8,000,000 | | 9,300,000 |
| Mean Size | | | | |
| All | 3.6 | 3.93 | | n.a. |
| Male Head | 3.64 | 3.93 | | n.a. |
| Female Head | 3.33 | 3.94 | | n.a. |
| Percentage | | | | |
| All | 100 | 10 | | 15.7 |
| Male Head | 100 | 7.1 | | 12.1 |
| Female Head | 100 | 32.5 | | 46.7 |
| Number of Children | 0-17 | 0-5 | 6-17 | |
| All | 70,000,000 | 3,300,000 | 6,525,000 | n.a. |
| Male Head | 61,800,000 | 1,875,000 | 3,575,000 | n.a. |
| Female Head | 8,200,000 | 1,430,000 | 3,000,000 | n.a. |
| Percentage of Children | | | | |
| All | 100 | 15.3 | 13.5 | n.a. |
| Male Head | 100 | 9.8 | 8.4 | n.a. |
| Female Head | 100 | 65.3 | 50.3 | n.a. |

Sources: U.S. Department of Commerce, Bureau of the Census, Current Population Reports, Series P-60, #77 and #81.

### TABLE IB(1)

### Number of Families and Children Receiving Public Assistance Under Aid to Families with Dependent Children, 1950-1971

| Year | Number Receiving Payment in December | |
|---|---|---|
| | Families | Children |
| 1950 | 651,000 | 1,661,000 |
| 1955 | 602,000 | 1,661,000 |
| 1960 | 803,000 | 2,370,000 |
| 1965 | 1,054,000 | 3,316,000 |
| 1970 | 2,553,000 | 7,034,000 |
| 1971 | 2,524,000 | 7,015,000 |

Source: Social Security Bulletin, Vol. 34 (Dec. 1971), pp. 54-55, as cited in Schultz et al., 1972, p. 188.

### TABLE IB(2)

### Children Receiving Public Assistance Under Aid to Families with Dependent Children by Age of Child, 1971

| Age | Number | % of All Children |
|---|---|---|
| unborn | 53,000 | .8 |
| < 1 | 363,000 | 5.2 |
| 1 | 351,000 | 5.0 |
| 2 | 409,000 | 5.8 |
| 3 | 406,000 | 5.8 |
| 4 | 405,000 | 5.8 |
| 5 | 414,000 | 5.9 |
| 6 | 424,000 | 6.0 |

Source: "Findings of the 1971 AFDC Study", U.S. Department of Health, Education and Welfare, Social & Rehabilitation Services, National Center for Social Statistics Report # AFDC - 1(71), 1971, Tables 33 & 34.

## Ethnicity

Any characteristic of a group of people which differentiates them from the "average" citizen -- skin color, language, religion, cultural background -- can operate as a disadvantage, both in its own right (the psychological and social effects of not being able to communicate or being forced to use "separate but equal" public facilities like schools and transportation) and in its interaction with other indices such as poverty. Three tables are given: (1) the major ethnic groups and their relationship to poverty; (2) those groups most obviously at a disadvantage because of language or color; and (3) the number of children estimated to be in need of bilingual education programs.

### TABLE IIA

Major Ethnic Groups in the U. S. and Their Relation to Poverty, 1970

| Origin or Descent | Total | Below Low Income Level | |
|---|---|---|---|
| | | Number | Percent of Total |
| Total | 202,500,000 | 25,500,000 | 12.6 |
| English, Scotch, Welsh | 31,000,000 | 2,700,000 | 8.6 |
| French | 5,200,000 | 500,000 | 9.3 |
| German | 25,700,000 | 2,200,000 | 8.6 |
| Irish | 16,300,000 | 1,700,000 | 10.5 |
| Italian | 8,700,000 | 500,000 | 6.1 |
| Polish | 5,000,000 | 300,000 | 5.3 |
| Russian | 2,100,000 | 100,000 | 4.5 |
| Spanish origin | 9,000,000 | 2,200,000 | 24.3 |
| Other | 84,700,000 | 13,100,000 | 15.4 |
| Not reported | 14,900,000 | 2,300,000 | 15.6 |

Source: U.S. Bureau of the Census, Current Population Reports,
Series P-60, #81.

## TABLE IIB

### Ethnic Groups at a Disadvantage Because of Language or Color

| | Total | 9 and under |
|---|---|---|
| All U. S. | 203,200,000 | 37,100,000 |
| Black | 22,580,000 | 5,500,000 |
| Spanish-Speaking | 8,960,000 | 2,430,000 |
| Chicano | 5,025,000 | 1,450,000 |
| Puerto Rican | 1,450,000 | 450,000 |
| Other | 2,485,000 | 530,000 |
| French | 5,200,000 | 1,400,000 |
| Portuguese | 450,000 | 125,000 |
| Japanese | 600,000 | 125,000 |
| Chinese | 440,000 | 100,000 |
| American Indian | 800,000 | 200,000 |

Sources: Bureau of the Census, Current Population Reports, Series P-20, #224; General Population Characteristics, 1970 Summary

## TABLE IIC

Children in Need of Bilingual Education Programs

| Ethnic or Language Background | Estimated Number of Children 3 to 18 Needing Bilingual Education |
|---|---|
| All | 5,050,000 |
| Spanish-dominant | 4,150,000 |
| Chicano | 3,045,000 |
| Puerto Rican | 776,000 |
| Other | 328,000 |
| French | 380,000 |
| Portuguese | 217,000 |
| Japanese | 11,000 |
| Chinese | 140,000 |
| American Indian | 130,000 |

Sources: 1) U.S. DHEW, Title 7, Division of Bilingual Education, June, 1972;
2) Andersson, T., et al., Bilingual Schooling in the U.S., Vol. II, U.S. DHEW, Office of Education, 1970.

## Family Weakness

Many criteria may be taken as evidence of family weakness. The major categories as shown in Table III A, B, C, D and E are (A) absence of one or both parents; (B) inadequate care -- which may be interpreted as neglect -- because of lack of day care arrangements for children of working mothers; (C) child abuse; (D) children in foster family care; and (E) other possibly stressful family situations (examples being children with an alcoholic parent, children involved in divorce, etc.)

### TABLE IIIA

### Parental Absence

| | 0 to 3 | 3 to 5 | 6 to 9 |
|---|---|---|---|
| Total | 10,500,000 | 11,235,000 | 16,675,000 |
| In Families | 10,430,000 | 11,150,000 | 16,550,000 |
| Both parents | 9,065,000 | 9,700,000 | 14,335,000 |
| Mother only | 985,000 | 1,150,000 | 1,800,000 |
| Father only | 50,000 | 75,000 | 150,000 |
| Neither parent | 325,000 | 230,000 | 275,000 |
| Not in families | 75,000 | 85,000 | 120,000 |

Source: U.S. Bureau of the Census, 1970.

Children in need of day care. Estimates of children in need of day care vary widely. However, many cite Spindler and Low's 1968 Children's Bureau publication "Child Care Arrangements of Working Mothers in the U.S.", which summarizes a survey made in 1965, and more recent Bureau of the Census statistics. The two major conclusions are (1) the majority of day care arrangements -- 90 to 95% (70-80% of 0-6 year olds) -- are unlicensed, usually in homes; (2) only a low percentage of arrangements -- 8% -- are reported by mothers to be unsatisfactory. Most of the dissatisfaction stems from unhappiness at being separated from her children and/or difficulties in logistics (cost, transportation to the day care center, etc.); only 3% of day care arrangements are seen as unsatisfactory by mothers because of detrimental effects on the children. Furthermore, less than 10% were unhappy with the "latchkey child" situation:

TABLE IIIB(1)

Day Care Arrangements by Type

| | 0 to 5 | 6 to 13 | % reported unsat. by mothers |
|---|---|---|---|
| Total number of children | 17,000,000 | 40,000,000 | |
| Number with child care arrangements | 4,000,000 | 9,000,000 | 7.6 |
| Care in own home | 2,000,000 | 4,000,000 | 6.2 |
| by father | 560,000 | 1,300,000 | 5.3 |
| by other relative over 16 | 560,000 | 1,400,000 | 4.6 |
| by other relative under 16 | 85,000 | 500,000 | 11.9 |
| by nonrelative | 600,000 | 620,000 | 7.6 |
| Care in home other than own | 1,200,000 | 800,000 | 8.7 |
| Group care center | 220,000 | 50,000 | 8.2 |
| Mother looked after child while working | 580,000 | 1,100,000 | 4.9 |
| Child looked after self "latchkey children" | 25,000 to 60,000 | 1,000,000 | 9.7 |

Sources: a) Low, S. & Spindler, P. "Child Care Arrangements of Working Mothers in the U.S.", U.S. DHEW, Children's Bureau Publication #461 - 1968;
b) Day Care and Child Development Council of America, as cited by R. Brademas in the House Congressional Record, Dec. 14, 1971, p. H12500).

TABLE IIIB(2)

Licensed or Approved Day Care Facilities, 1969

| | Total | Day Care Centers | Family Day Care Homes |
|---|---|---|---|
| Number | 46,300 | 13,600 | 32,700 |
| Capacity | 640,000 | 520,000 | 120,000 |

Source: U.S. DHEW, Social and Rehabilitation Service, National Center for Social Statistics.

Abused children. Estimates of the prevalence of child abuse vary widely. This is due both to differing counting procedures and the lack of a commonly accepted definition. A conservative figure is that of legally reported cases: 6,617 in 1970, or approximately 9 per 100,000 children under 18. The upper bound gathered from survey is in the vicinity of 4,000,000.

An accepted definition of child abuse is that used in the National Opinion Research Center's 1965 study questioning 1,520 married people about the topic: the physical injury of a child by its caretaker, either deliberately or in anger. Although over half of all incidences of child abuse are considered "not serious", 5% result in permanent physical damage.

TABLE IIIC(1)

Types of Injuries in Child Abuse

| Type of Injury | Percentage of Cases |
|---|---|
| Bruises, welts | 67% |
| Abrasions, contusions and lacerations | 32% |
| Burns | 10% |
| Fractures (excluding skull) | 10% |
| Wounds | 8% |
| Skull fractures | 4% |
| Malnutrition (deliberate) | 4% |

Sources: National Opinion Research Center, 1965; Gil, D. G., Violence against children, Cambridge: Harvard University Press, 1970.

## TABLE IIIC(2)

### Percentage Distribution of Child Abuse by Age, 1967-68

| Age | Percentage of All Cases |
|---|---|
| < 1 | 14% |
| < 2 | 24% |
| < 6 | 54% |
| < 9 | 69% |

Sources: National Opinion Research Center, 1965; Gil, D. G., Violence against children, Cambridge: Harvard University Press, 1970.

## TABLE IIID

### Children 0-18 in Foster Families in U.S., Puerto Rico, and Virgin Islands, 1969

| Total | Public | Voluntary |
|---|---|---|
| 249,000 | 205,000 | 44,000 |

Source: U.S. DHEW, Social Rehabilitation Service National Center for Social Statistics

### TABLE IIIE(1)

### Number of Parents Who are Alcoholic*

| | Number of Alcoholics | Percentage |
|---|---|---|
| Men | 4,500,000 | 7.3 |
| Women | 900,000 | 1.3 |

*Figures for alcoholic parents are not available; however, of the 126 million people 20 or over, 5.4 million were alcoholic in 1970.

Source: Efron, V., Keller, M., and Guriolo, C. _Statistics on consumption of alcohol and on alcoholism_. New Brunswick, New Jersey: Rutgers Center of Alcohol Studies, 1972, p. 11.

### TABLE IIIE(2)

### Number of Children Involved in Divorces and Annulments

| Year | Estimated Number of Children 0-17 | Rate per 1000 Children 0-17 |
|---|---|---|
| 1955 | 347,000 | 6.3 |
| 1960 | 463,000 | 7.2 |
| 1965r | 630,000 | 8.9 |
| 1968 | 834,000 | 11.1 |

Source: Vital and Health Statistics, Vol. VIII, Series 21, _Marriage and Divorce_. U.S. DHEW, Health Services and Mental Health Administration, National Center for Health Statistics.

## Crisis

Many of the criteria of the other four categories are proxies for crisis situations -- for example, those who have no parents, or who are suffering from severe malnutrition. (There are also correlations which lead one to expect crisis, e.g., infants born to mothers under age 15 have an infant mortality rate 2.3 times that for all infants.) We limit the tables here, however, to criteria which -- if unattended -- often lead either to death or institutionalization: low birth weight, certain diseases, handicaps, and mental and emotional disturbances.

### TABLE IVA(1)

Influence of Low Birth Weight on Infant Mortality

| Birth Weight | Infant Mortality Rate per 1,000 Live Births |
|---|---|
| 1,000 grams or less (2 lb 3 oz or less) | 919 |
| 1,001 - 1,500 grams (from 2 lb 4 oz) | 513 |
| 1,501 - 2,000 grams (from 3 lb 3 oz) | 207 |
| 2,001 - 2,500 grams (from 4 lb 7 oz) | 58 |
| 2,501 - 3,000 grams (from 5 lb 9 oz) | 19 |
| 3,001 - 4,000 grams (from 6 lb 10 oz) | 9 |
| 4,501 grams or more (from 9 lb 15 oz) | 13 |

Source: U.S. DHEW, Health Services and Mental Health Administration, National Center for Health Statistics.

## TABLE IVA(2)

### Incidence of Low Birth Weight, by Color, 1965

| | All Births | White | Nonwhite |
|---|---|---|---|
| Total Number of Live Births | 3,760,360 | 3,123,860 | 636,500 |
| Percentage Under 2,500 grams | 8.3% | 7.2% | 13.8% |

Source: Vital Statistics of the U.S., 1965, U.S. DHEW, Health Services and Mental Health Administration, National Center for Health Statistics.

## TABLE IVB

### Number of Deaths Due to Major Diseases and Lead Poisoning*

| | 0 to 5 | 5 to 19 |
|---|---|---|
| Infectious diseases | 202-313 | 1122-1411 |
| Neoplasms | 115-179 | 1023-1286 |
| Diabetes | 0 | 132-166 |
| Vascular diseases | 0 | 66-83 |
| Pneumonia (1 to 14) | | 2,500 |
| Other diseases | 72-112 | 627-788 |
| Prenatal influence | 880-1365 | 20,889 |
| Lead Poisoning (0 to 18) | | 200 |
| (symptomatic but not fatal) | | 30,000 |
| (asymptomatic) | | 80,000 |

*Where two figures are given, they represent estimates from different sources.

Sources: 1) U.S. DHEW, Division of Planning and Standards;
2) U.S. DHEW, Health Services and Mental Health Administration.

TABLE IVC

Estimates of Those with Handicaps Who Need Specialized Service, 1970

| Handicap | 0 to 18 |
|---|---|
| Deaf | 316,500 |
| Visually Impaired or Blind | 67,000 |
| Binocular vision* | (7.4% at age 6; 17.2% at age 11) |
| Amblyopia* | (6% of all under 6) |
| Speech Impaired | 2,180,600 |
| Crippled | 200,000 |
| Learning Disabilities | 1,090,000 |
| Mentally Retarded | 1,361,000 |
| Emotionally Disturbed | 800,000 |

*1965 data from U.S. Public Health Survey and the American Journal of Public Health.

Source: Bureau for Education of the Handicapped, 1971.

## TABLE IVD

## Children in Institutions, 1966

| Category | Number, Ages 0 to 18 |
|---|---|
| Neglected/Dependent | 60,500 |
| Predelinquent/Delinquent | 55,000 |
| Detention | 11,000 |
| Maternity Homes | 5,500 |
| Temporary Shelter | 2,000 |
| Emotionally Disturbed | 14,000 |
| Psychiatric Inpatient (separated from parents) | 8,000 |
| Psychiatric Outpatient | |
| Male | 1,400,000 |
| Female | 740,000 |

Source: Pappenfort, D. M., & Kilpatrick, D. M., *A Census of Children's Residential Institutions in the United States, Puerto Rico, and the Virgin Islands, 1966. Volume 1: Seven Types of Institutions*. Chicago: The School of Social Service Administration, The University of Chicago, 1970.

Equity

Several standards of disadvantage express some form of inequity. The disadvantage coming from poverty or ethnicity is often interpreted as a disadvantage in equity. It is argued that for these groups there are inequities in the distribution of these resources, or equal access to the resources is not permitted and encouraged, or equal benefits do not accrue from them for all children. An example of inequity of access is the utilization rates of health services for different ethnic and income groups. An example of inequity of benefit is said to occur in comparisons between inner city and suburban school systems -- although expenditures per pupil may be identical, considerable amounts of the inner city school's budget goes to offset vandalism and to provide increased security. Moreover, it is difficult for the urban schools to compete with the suburban schools for equally competent teachers at comparable pay. The tables are representative of these inequities in areas such as housing characteristics, educational expenditures, child nutrition, and use of health services.

Equity arguments can include some children as disadvantaged who are not caught by other standards. Migrant children, Appalachian children, or more generally, all children living in isolated rural areas, are argumentatively disadvantaged because of their limited access to normative health and educational facilities. We have not included counts of such children but it is worth noting that they are included in some contemporary discussions of disadvantage.

TABLE VA(1)

Housing Characteristics by Race

| | All Occupied Housing Units, U. S. 1970 | Housing Units with Negro Head of Household |
|---|---|---|
| Total | 63,500,000 | 6,180,000 |
| Ratio of Renter to Owner Occupied | 1:2 (white head of household only) | 6:5 |
| Lack hot and cold water | 5% | 14% |
| Lack flush toilet | 4% | 11% |
| Lack bath or shower | 5% | 13% |
| Without complete kitchen | 4.5% | 12% |
| Lack telephone | 13% | 32% |
| Less than .50 people per room | 50% | 37% |
| More than 1.01 people per room | 5% | 20% |

Source: U.S. Bureau of the Census, General Housing Characteristics: U.S. Summary, 1970.

TABLE VA(2)

Value of Owner-occupied Units by Location

| | Value |
|---|---|
| All Units | $ 7,000 |
| Inside SMSAs | 19,000 |
| Central Cities | 16,400 |
| Outside Central Cities | 20,700 |
| Outside SMSAs | 12,100 |

Source: U. S. Bureau of the Census, *General Housing Characteristics, U. S. Summary, 1970*.

Children of migrant workers. This is a category particularly difficult to put a number on. The most reliable figure -- but one that certainly underestimates the children at a disequity with regard to health facilities, education, etc. because of their migratory status -- is the number involved in the Title I Migrant Education Program: 329,000, ages 5-21. Source: U.S. DHEW, Migrant Education Program, August, 1972.

## TABLE VB

Expenditures per Pupil in Ninety-fifth Percentile and Fifth Percentile School Districts and State Averages, by State, 1969-70 School Year, in Dollars

| | *Expenditure per pupil* | | |
|---|---|---|---|
| *State* | *95th percentile district* | *5th percentile district* | *State average* |
| Alabama | 520 | 369 | 438 |
| Alaska | 1,454 | 868 | 1,083 |
| Arizona | 1,681 | 552 | 766 |
| Arkansas | 631 | 324 | 534 |
| California | 1,250 | 504 | 922 |
| Colorado | 1,394 | 574 | 695 |
| Connecticut | 1,034 | 565 | 882 |
| Delaware | 826 | 661 | 793 |
| District of Columbia | n.a. | n.a. | 977 |
| Florida | 881 | 597 | 710 |
| Georgia | 598 | 421 | 600 |
| Hawaii | 544 | 434 | 851 |
| Idaho | 1,197 | 565 | 629 |
| Illinois | 1,283 | 595 | 803 |
| Indiana | 716 | 436 | 624 |
| Iowa | 1,026 | 652 | 890 |
| Kansas | 1,111 | 539 | 721 |
| Kentucky | 538 | 391 | 612 |
| Louisiana | 891 | 537 | 620 |
| Maine | 784 | 404 | 683 |
| Maryland | 819 | 676 | 882 |
| Massachusetts | 1,286 | 556 | 753 |
| Michigan | 893 | 539 | 842 |
| Minnesota | 809 | 503 | 883 |
| Mississippi | 627 | 346 | 476 |
| Missouri | 848 | 393 | 714 |
| Montana | 2,544 | 623 | 822 |
| Nebraska | 1,357 | 388 | 527 |
| Nevada | 1,612 | 746 | 764 |
| New Hampshire | 814 | 373 | 692 |
| New Jersey | 1,112 | 573 | 963 |
| New Mexico | 962 | 497 | 724 |
| New York | 1,410 | 761 | 1,237 |
| North Carolina | 681 | 492 | 609 |
| North Dakota | 1,100 | 530 | 621 |
| Ohio | 834 | 488 | 680 |
| Oklahoma | 1,063 | 445 | 540 |
| Oregon | 1,499 | 562 | 891 |
| Pennsylvania | 1,471 | 687 | 876 |
| Rhode Island | 986 | 568 | 904 |
| South Carolina | 562 | 426 | 555 |
| South Dakota | 1,513 | 422 | 657 |
| Tennessee | 594 | 376 | 560 |
| Texas | 1,198 | 426 | 581 |
| Utah | 1,022 | 534 | [illegible]00 |
| Vermont | 947 | 433 | 934 |
| Virginia | 723 | 489 | 691 |
| Washington | 1,632 | 627 | 743 |
| West Virginia | 706 | 527 | 626 |
| Wisconsin | 968 | 584 | 875 |
| Wyoming | 3,820 | 681 | 810 |

Source: Review of Existing State School Finance Programs, Vol. 2, Documentation of Disparities in the Financing of Public Elementary and Secondary School Systems -- By State. A Commission Staff Report submitted to the President's Commission on School Finance (1972), pp. 19ff, as cited in Schultz et al., 1972, p. 329.

## TABLE VC

### Estimated Infant Deaths per 1,000 Legitimate Live Births, 1964-66

| Cause of Death | Race of infant and family income | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | All races | | | | White | | | | Black | | | |
| | All incomes | Under $3,000 | $3,000 $4,999 | $5,000 & over | All incomes | Under $3,000 | $3,000 $4,999 | $5,000 & over | All incomes | Under $3,000 | $3,000 $4,999 | $5,000 & over |
| | | | | | Deaths per 1,000 live births | | | | | | | |
| All causes | 23.0 | 32.1 | 25.1 | 19.1 | 20.8 | 27.3 | 22.1 | 18.7 | 39.5 | 42.5 | 46.8 | 27.1 |
| Infectious and Parasitic Diseases | 0.2 | 0.5 | 0.1 | 0.1 | 0.1 | 0.6 | 0.1 | 0.1 | 0.3 | 0.4 | 0.4 | 0.0 |
| Influenza, pneumonia, and all other diseases of respiratory system | 3.0 | 5.5 | 3.4 | 2.0 | 2.4 | 4.3 | 3.0 | 1.8 | 7.1 | 8.0 | 7.1 | 5.5 |
| Gastritis, duodenitis, and all other diseases of digestive system | 0.7 | 1.5 | 0.8 | 0.4 | 0.5 | 1.2 | 0.4 | 0.4 | 1.6 | 1.[illegible] | 2.7 | 0.7 |
| Congenital malformation | 3.7 | 3.9 | 3.9 | 3.5 | 3.8 | 4.4 | 3.8 | 3.6 | 2.9 | 2.8 | 4.4 | 1.7 |
| Birth injuries | 1.9 | 1.7 | 2.7 | 1.7 | 1.9 | 1.5 | 2.3 | 1.8 | 2.4 | 1.9 | 5.5 | 0.4 |

TABLE VC (Continued)

| Cause of Death | Race of infant and family income | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | All races | | | | White | | | | Black | | | |
| | All incomes | Under $3,000 | $3,000 $4,999 | $5,000 & over | All incomes | Under $3,000 | $3,000 $4,999 | $5,000 & over | All incomes | Under $3,000 | $3,000 $4,999 | $5,000 & over |
| | Deaths per 1,000 live births | | | | | | | | | | | |
| Postnatal asphyxia | 3,8 | 4.6 | 3.5 | 3.7 | 3.5 | 3.6 | 3.2 | 3.6 | 6.5 | 7.2 | 6.1 | 5.4 |
| Hemolytic disease of newborn (erythroblastosis) | 0.4 | 0.2 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.2 | 0.0 | 0.4 | 0.4 |
| Immaturity, unqualified | 3.6 | 5.2 | 4.3 | 2.8 | 3.1 | 4.5 | 3.3 | 2.7 | 6.9 | 6.7 | 10.4 | 4.4 |
| Certain other diseases of early infancy | 3.6 | 5.0 | 3.7 | 3.1 | 3.2 | 4.1 | 3.5 | 2.9 | 6.1 | 7.1 | 5.2 | 5.2 |
| Accidents | 0.8 | 1.5 | 0.9 | 0.6 | 0.7 | 1.0 | 0.8 | 0.5 | 1.7 | 2.3 | 0.9 | 1.4 |
| Residual | 1.5 | 2.6 | 1.5 | 1.0 | 1.2 | 1.9 | 1.2 | 1.0 | 3.8 | 4.6 | 4.0 | 2.1 |

Source: U.S. DHEW, Health Services and Mental Health Administration, National Center for Health Statistics, Vital and Health Statistics, Series 22 #14, 1972.

## TABLE VC(1)

### Nutrition Deficiencies: Incidence of Unacceptable Levels of Certain Nutrients

| Characteristic | Nutrient | | | | | |
|---|---|---|---|---|---|---|
| Poverty Index Ratio* | Hemoglobin Percent Unacceptable | Hematocrit Percent Unacceptable | Vitamin A Percent Unacceptable | Vitamin C Percent Unacceptable | Riboflavin Percent Unacceptable | Thiamin Percent Unacceptable |
| < 0.50 | 26 | 25 | 34 | 16 | 21 | 11 |
| 0.50-0.99 | 24 | 24 | 32 | 9 | 16 | 12 |
| 1.00-1.49 | 16 | 22 | 26 | 6 | 14 | 9 |
| 1.50-1.99 | 15 | 22 | 19 | 9 | 13 | 7 |
| 2.00 & over | 13 | 19 | 11 | 5 | 8 | 8 |
| Ethnic Group | | | | | | |
| Negro | 34 | 27 | 23 | 12 | 21 | 13 |
| White | 15 | 19 | 15 | 9 | 7 | 5 |
| Age | | | | | | |
| < 6 | 25 | 16 | 54 | 9 | 24 | 5 |
| 6-9 | 24 | 21 | 53 | 8 | 20 | 8 |

*The Poverty Index Ratio is based on income, family size, farm or non-farm residence, sex and age of head of household.

Source: U.S. DHEW, Health Services and Mental Health Administration, Center for Disease Control Nutrition Program, 1968-69 survey.

TABLE VD(2)

Nutrition Deficiencies: Iron Deficiency Anemia*

| Age | Total Population | Total Showing Signs of Iron Deficiency Anemia |
|---|---|---|
| 0-2 | 7,200,000 | 2,500,000 to 3,600,000 |
| 2-6 | 11,000,000 | 1,650,000 to 4,400,000 |

*Unacceptable levels of hemoglobin, hematocrit and certain other biochemical indicators lead to iron deficiency anemia.

Source: Owen, G. Evaluation of Nutritional Status of Preschool Children in the U.S., Maternal & Child Health Service, U.S. DHEW, 1971. As cited by Woolsey, S. Nutritional Status of Children, Office of Child Development, U.S. DHEW, 1971.

TABLE VE(1)

Percent of children under age 17 who saw a physician within 1 year of interview, by color, sex, place of residence, geographic region, family income, and education of head of family: United States, July 1966 - June 1967.

| Category | Percentage |
|---|---|
| All Children | 68.0 |
| Color: White | 70.8 |
| All other | 52.5 |
| Sex: Male | 69.0 |
| Female | 67.1 |
| Residence: SMSA | 70.9 |
| Farm | 64.4 |
| Non-farm | 54.4 |
| Geographic Region: Northeast | 74.3 |
| North Central | 68.0 |
| South | 62.5 |
| West | 69.5 |
| Family Income: > $5,000 | 52.9 |
| $5,000 - $6,999 | 64.8 |
| > $7,000 | 74.0 |
| Years of Education of Head of Family: > 9 | 54.3 |
| 9 to 12 | 69.1 |
| > 12 | 80.7 |

Source: U.S. DHEW, HSMHA, National Center for Health Statistics.

TABLE VE(2)

Number of physician visits per year per child under age 17 by color, sex, place of residence, geographic region, family income, and education of head of family: United States, July 1966 - June 1967.

| Category | Visits per Child |
|---|---|
| All Children | 3.6 |
| Color: White | 3.9 |
| All other | 2.0 |
| Sex: Male | 3.7 |
| Female | 3.5 |
| Residence: SMSA | 3.9 |
| Farm | 3.4 |
| Non-farm | 2.0 |
| Geographic Region: Northeast | 4.1 |
| North Central | 3.5 |
| South | 3.1 |
| West | 4.0 |
| Family Income: > $5,000 | 2.5 |
| $5,000 - $6,999 | 3.3 |
| > $7,000 | 4.1 |
| Years of Education of Head of Family: > 9 | 2.3 |
| 9 to 12 | 3.7 |
| > 12 | 4.8 |

Source: U.S. DHEW, HSMHA, National Center for Health Statistics.

### TABLE VE(3)

Percent of children under age 17 who have never seen a dentist by color, sex, place of residence, geographic region, family income, and education of head of family: United States, July 1963 - June 1964.

| Category | Percentage |
|---|---|
| All Children | 42.6 |
| Color: White<br>All other | 38.7<br>66.1 |
| Sex: Male<br>Female | 43.2<br>42.1 |
| Residence: SMSA<br>Farm<br>Non-farm | 39.8<br>48.9<br>47.1 |
| Geographic Region: Northeast<br>North Central<br>South<br>West | 36.0<br>37.2<br>53.8<br>40.1 |
| Family Income: > $5,000<br>$5,000 - $6,999<br>> $7,000 | 61.7<br>45.3<br>27.3 |
| Years of Education of Head of Family: > 9<br>9 to 12<br>> 12 | 52.9<br>41.2<br>31.5 |

Source: U.S. DHEW, HSMHA, National Center for Health Statistics.

TABLE VE(4)

Decayed and Filled Teeth of Children Age 6 to 11, 1963-65

| Annual family income | Average number per child | |
|---|---|---|
| | filled teeth | decayed teeth |
| Less than $3,000 | 0.7 | 3.4 |
| $3,000-$4,999 | 1.3 | 3.0 |
| $5,000-$6,999 | 2.1 | 2.2 |
| $7,000-$9,999 | 2.7 | 1.7 |
| $10,000-$14,999 | 3.3 | 1.4 |
| $15,000 and over | 3.6 | 0.7 |

Source: U.S. Department of Health, Education and Welfare, Health Services and Mental Health Administration, National Center for Health Statistics

Appendix IIIB

## Federal Programs Affecting Children--A Listing

This chart represents the outcome of an attempt to list, in some standardized and simple form, those federal programs which directly or indirectly affect children. In the case of indirect effects, we have tried to limit the list to those which act directly on some component of the child's life. Thus child health research grants appear in the list, while city planning research support does not.

In general, four purposes underlie these programs: the preparation of children to assume adult economic roles (pp. 1-6); assimilation of children into an American community of shared ideals and values (pp. 6 and 7); partial regulation of the labor market--implying the gradual elimination of child labor and school and day care support to provide jobs for parents and care for children (page 8); and the provision of direct or indirect services and economic support for children in crisis or seen to be at risk, or for their families. The vast majority of programs (pp. 9-84) fall in this latter category. Many other classifications of these programs are possible; an attempt was made as part of this study to analyze several of them. The results are described in Appendix IIIC, which follows this one. No perfect taxonomy has been found; in perusing the list, the reader must recognize that the placement of programs is in most cases somewhat arbitrary.

The list was compiled from the Appalachian Regional Commission's "Federal Programs for Young Children" (1970), from the Catalog of Federal Domestic Assistance (1971 and 1972), and with the editing assistance of HEW's Office of Planning and Evaluation in May, 1972. The headings are in general self-explanatory; "Our Ref." is a number which we assigned to each program for easy reference from the body of the report. Appropriations are for entire programs, not just child components. In some cases, we have suggested a basis for establishment of the program in a column headed "Basis of Prog.", where (a) is compassion, (b) public welfare, and (c) equity. The numbers (such as 13.608) in the title column refer to the index system in the Catalog of Federal Domestic Assistance.

We have used program descriptions without double-checking their accuracy; if they do not in fact reflect a program's operation, the misrepresentation is unintentional.

Finally, the blank "% eligible" column reflects the peril omnipresent in overambitious data collection goals.

| PROGRAM TITLE FED. AGENCY YR. ENACTED | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|
| Child Care Services Title IV-A CSA-SRS-HEW 13.748 | 4 | *To provide child care as authorized & required by SSA. Out-of-home, in home. Employment related.<br>**Employment or training related. | *Families. | | *Grants made to public welfare depts. of each state. May be used to cover up to 75% of total cost and may not include construction.<br>**Public Welfare Departments | $26.4 (71)<br>$74 (72) |
| Preschool, Elementary & Secondary Personnel Development Grants to States. OE, HEW 1970? 13.473 | 3 | *To provide Grants to States to enable them to attract and train persons not engaged in teaching for communities experiencing critical shortages. | *Preschool, elementary and secondary school students.<br>**7,224 prosp. teachers & 7,101 aides in short-term pre-service training (70) | | *Local school districts submit proposals which must be under approved State Plan. Formula based on number of children enrolled in public and private elem. and second. schools. Not to be less than $100,000. Supplement, not supplant, other funds. Not more than 1/3 to train and attract teacher aides.<br>**Preschool, elementary and secondary schools. | $15 (71)<br>$7.0 (72) |
| Educational Classroom Personnel Training Training - Early Childhood OE, HEW 1970<br>13.416 | | *To train and retrain educ. personnel. | *Children, ages 3-9.<br>**4,556 persons trained. | | *Proposals must be approved by OE, and State must be satisfied that local programs will be coordinated with EDPA, Part B.<br>**Institutions of higher education, State and local ed. agencies. | $5.7 (71)<br>$4.3 (72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. APPROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|
| Educational Classroom Personnel Training - Special Education<br>OE, HEW<br>1970<br>13.417 | 4 | *To support projects to train regular classroom personnel how to meet needs of handicapped children in regular classrooms. | *Handicapped children.<br>**5,000 persons trained. (70) | | *Proposal approved by OE, and State must be satisfied that local programs will be coordinated with EDPA, Part B.<br>**Institutions of higher education, State and local ed. agencies. | $6.6<br>(71)<br>$4.0<br>(72) |
| Educational Personnel Development Support Personnel<br>OE, HEW<br>1965 amended<br>13.508 - 13.509<br>Including: Media Specialists (MS)<br>Pupil Personnel Specialists (PPS) | | *Supports projects to train specialized personnel to assist teachers in designing, selecting, producing and employing print and nonprint materials for classroom use and increase competence of individuals serving spec. personnel functions under pupil personnel services subprogram. | *Elementary and secondary school students<br>**Media Specialists: 17 projects, 1,270 participants.<br>Pupil Personnel: 50 projects, 1,476 participants.<br>1969-70 school year. | | *Proposals approved by OE, and State must be satisfied that local programs will be coordinated with EDPA, Part B.<br>**Institutions of higher education, State and local education agencies. | (MS) $2.3<br>(PPS)$4.8<br>(71)<br>(MS) $1.8<br>(PPS)$3.3<br>(72) |
| Teacher Corps Operation and Training<br>Title II<br>OE, HEW<br>13.489 | 4 | *Aims to improve educational opportunities for children of low-income families by attracting able college graduates by preparing them for teaching through a 2 year program of on-the-job training. | *Children (students) from low-income families.<br>**5,500 since 1966. | | *School system pays 10%, and Federal government gives grants to local schools to pay up to 90% of their salaries plus administrative costs. Grants to universities cover all tuition and administrative costs for undergraduate and graduate studies.<br>**Local Universities with local school districts. | $30.8<br>(71)<br>$37.4<br>(72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|
| Educational Staff Training - More Effective School Personnel Utilization<br>OE, HEW<br>1970<br>13.425 | | *To train and retrain experienced personnel for new roles in schools which provide promotional opportunities within the institutional process to receive maximum use of talents. | **1,376 teachers got intensive training. 6,000 benefited from workshops. | | *Grant awarded direct to agency (which must have approval of state school officer) usually for a portion of the target figure. Usually for one year only.<br>**Institutions of higher education, State departments of education, and local public educational agencies. | $ 2.8<br>(71)<br>$ 3.0<br>(72) |
| Educational Staff Training - Teacher Leadership Development.<br>not yet in operation<br>OE, HEW<br>(1965)<br>13.514 | | *Supports projects to bring talented college graduates into instructional roles in elementary and secondary schools. | *Students in elementary and secondary schools. | | *Proposals approved by OE. May not be used to train administrative personnel.<br>**Institutions of higher education. | $ 3.9<br>(71)<br>$ 3.1<br>(72) |
| Encourage Qualified Persons to Enter Education Careers<br>OE, HEW<br>1965<br>? | | *Awards grants and contracts to support efforts to reduce chronic shortage of teachers and improve quality of instruction. | *Students. | | *Direct to agency.<br>**State and local educational agencies, colleges and universities, other public, private or nonprofit organizations. | $500,000.00<br>(71) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|
| Promotion of the Arts - Arts Education National Endowment for the Arts, National Foundation on the Arts & Humanities<br>1965<br>45.003 | | *To provide grants for special innovative projects in Arts education. | *Students.<br>**38 grants (70). | | *Individuals must be of "exceptional talent", projects should have national implications; grants to organization, with few exceptions, must be matched, at least dollar for dollar with non-Federal funds.<br>**Individuals and nonprofit tax-exempt organizations. | $ 571,831<br>(71)<br>$2,417,244<br>(72) |
| Research & Development Centers<br>OE, HEW<br>1965<br>13.411 | | *Create improved educational programs by bringing together resources and interdisciplinary talent. | *Students. | | *Direct to grantee. Sponsoring Universities provide local support in form of space and staff time.<br>**Universities. | $ 9.0<br>(71)<br>$10.4<br>(72) |
| Supplementary Educational Centers and Services<br>OE, HEW<br>1967<br>13.519 | | *To stimulate local school districts to seek creative solutions to their educational problems. | *Elementary and secondary school students.<br>**10 million students since 1965 (all Title III). | | *Each State and D.C. receive base allocation of $200,000. Half the remainder apportioned in relation to school age population in State, other half in relation to State's total resident population. Local educational agencies apply through State, which must have OE State approved plan. 15% of funds must go to handicapped.<br>**State and local educational agencies. | $124.0<br>(71)<br>$127.0<br>(72) |
| | | | | | | |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. APPROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|
| Research and Development-Educational Laboratories<br>OE, HEW<br>1965<br>13.412 | | *Primarily to support educational development, field testing and refinement of curricula. | *Students.<br>**15 laboratories. | | *For most laboratories, 100% of their funding comes from the Federal government.<br>**Nonprofit corporation of local educators, businessmen and community leaders. | $24.4<br>(71)<br>$22.6<br>(72) |
| Research and Development-General Education (Project) Research<br>OE, HEW<br>1965<br>13.422 | | *Research, development, demonstration and dissemination projects to improve educational practice, expand knowledge about learning and teaching and develop capabilities needed to carry out above. | *Students. | | *Support not available for purely operational activities.<br>**Colleges and Universities, State and local school systems, public and private organizations, individuals. | $13.5<br>(71)<br>$16.0<br>(72) |
| Educational Research - Experimental Schools<br>OE, HEW<br>1971<br>13.521 | | *Provide a limited number of models of successful efforts for use by other consumers. | *Students, high priority to those from low-income families. | | *Stimulate the experiments, not replace or subsidize local efforts. No matching requirements. At minimum K-12 population and program costs must be over and above normal per pupil expenditures of the district for the target population.<br>**Local school districts, private contractors. | $12.0<br>(71)<br>$15.0<br>(72) |
| Indian - Federal School<br>BIA, DI<br>1921<br>15.110 | 4 | *To provide educational opportunities for eligible Indian children who do not have public ed. ppportunities to meet their needs. | *Indian children.<br>**52,195 students ('70) | | *Not applicable.<br>**BIA Schools. | $117.6<br>(71)<br>$125.0<br>(72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. APPROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|
| Indians - Assistance to Non-Federal Schools<br>BIA, DI<br>1936<br>15.130 | 4 | *To ensure adequate education opportunity for Indian Children. | *Indian children.<br>**72,081 pupils ('70) | | *Amount of aid based on formula specified to State plan which is geared to State system of school finance. All other sources must be exhausted before this is turned to.<br>**Non-Federal schools. | $19.49<br>(71)<br>$22.65<br>(72) |
| Desegregation of Public Education<br>CRD, Dept. of Justice<br>1964<br>16.100 | 4 | *To provide equal education for children regardless of race, religion or national origin. | *Children. | | *Not applicable.<br>**Attorney General or private suits. | Not separately identifiable<br>Total CRD<br>$ 5.416<br>(71)<br>$ 5.891<br>(72) |
| Educational Research - Major Pilot Projects<br>Bureau of Research, Of. of Ed., HEW<br>1969<br>? | 1 | *Increase effective community participation in school governance and improve school performance through joint community-professional staff decisions about alternatives available. | *School children. | | *Federal grants to school system.<br>**Public School Systems. | $ 5.0<br>(71) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|
| Extension Programs for Assisting in Community Development Extension Service Dept of Agriculture, now under: Cooperative Extension Services CES<br>10.500 | 4 | *Enhance social and economic wellbeing through educational and informational programs.<br>**Training and other manpower. | *Communities. | | *Formula grants to State extension services on basis of population density, variety of agriculture and other factors. (Each State receives 10% plus an amount proportional to the number of poor people in the State according to OEO standards.) 100% matching funds from State.<br>**State extension services (through land-grant colleges). | $ 9.34<br>(71)<br>Total CES<br>$138.6<br>(71)<br>$149.3<br>(72) |
| Extension Programs for Improved Family Living Extension Service Dept of Agruculture, now under: CES<br>10.502 | 4 | *Help families acquire the knowledge and skills to adopt the highest level of family life possible through services including: training & education for parents; family management; health and safety; personal development and human relations; and purchasing habits. | *Families.<br>**9 million families. | | *Formula grants to State extension services on basis of farm and rural population and special considerations. 100% matching funds from State.<br>**State extension services (through land-grant colleges). | $ 17.74<br>(71)<br>Total CES<br>$138.6<br>(71)<br>$149.3<br>(72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|
| State Institutional Training Services<br>DOL, Manpwr Admin. | 1,4 | *Provides institutional training and placement in day care occupations. | *Children. | | *Federal contribution for allowances to trainees is 100%, for cost of inst. training, 90% non-Federal contribution may be in cost or kind.<br>**State employment service offices and State vocational educ. offices, jointly. | $ 8.0<br>(71) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. APPROPRIATE (FY) (millions |
|---|---|---|---|---|---|---|---|
| Child Development Headstart<br>HEW, Office of Child Development<br>1964<br>13.600 | b | 1,2,3 | *Comprehensive Education (education, health, nutrition, parent and career involvement).<br>**Research and evaluation and parent-child center. | *Disadvantaged preschool children.<br>**3,300,000 (since inception). | 15% | *Max. 80% Federal/20% local community. Direct to unit providing service. Up to 10% non-poor children.<br>**Local CAA's and other public and nonprofit agencies. | $360.0<br>(71)<br>$376.0<br>(72) |
| Follow through<br>OE, HEW<br>1964<br>13.433 | b | 1,2,3 | *To help target population sustain gains made in Headstart or similar preschool programs (health, nutrition, education, social and psychological, teacher training, parent involvement). | *Children in primary grades from low income families.<br>**35,000 (69-70). | | *Matching Fed. grants administered through State ed. agency of a min. 75% Community may provide up to 15% of total grant by Title I ESEA funds.<br>**Local public educational agencies. | $ 69.0<br>(71)<br>$ 57.7<br>(72) |
| Community Immunization Services<br>HSMHA of HEW | b | | *Improve the immunization status of the population. | *Especially children.<br>**33 million children | | *Federally funded, through State health officer to health agencies.<br>**National, State, and local health departments. | $ 25.0<br>(71) |
| Migrant Health Grants<br>HSMHA of HEW<br>13.246 | c | | *Health services to migrants to raise level of health to that of general population. | *Migrant agricultural workers and families.<br>**420,000. | | *Federally funded. Direct to unit providing service.<br>**State and local health departments, nonprofit private agencies. | $ 14.0<br>(71)<br>$ 18.0<br>(72) |
| | | | | | | | |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. APPROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Migrant Health Direct Operations - Technical Assistance HSMHA of HEW | b | | *To provide technical consultation and assistance to migrant health projects and other organizations which can provide services to immigrants. | *Migrant agricultural workers and families. | | *Totally Federally funded. Regional and central office staff provide consultation. | $ 1.0<br>(71) |
| Indian Health - Patient Medical Care Ind. Health Service, HSMHA, HEW<br>13.228 | a | | *Provide full range of curative, preventive, and rehabilitative services.<br>**(Dental & nutritional included.) | *Indians on or near reservations and natives of Alaska. | | **Hospitals, health centers, and stations, private physicians and dentists. | $108.9<br>(71)<br>$127.0<br>(72) |
| Medical Assistance Program Med. Services Adm., SRS, HEW<br>13.714 | b | | *Assistance for rehabilitation and other services. | *Families eligible for public assist. payments under SSA and all children under 21 who need medical care and can't afford it.<br>**8.6 million in 1968. | | *Federal participation is 50-83% of State's payments to medical venders (amount depending upon per capita income of State), 75% of staff and training costs, 50% of administrative costs.<br>**State medical assistance agencies, private providers of medical care. | $3.8 bill<br>(71)<br>$4.0 bill<br>(72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Family Planning Projects Maternal & Child Health, HSMHA, HEW 1967 13.217 | b | | *Help reduce maternal and infant mortality and morbidity. | *Low-income mothers and infants. | | *Direct Federal grants cover up to 75% of cost of providing family planning services. Remainder covered through matching funds.<br>**State and local health agencies or other public or non-profit private organizations. | $29.25 (71)<br>$27.0 (72) |
| Intensive Infant Care Projects Maternal & Child Health Service, HSMHA, HEW 1967 13.230 | a | | *Health care during their first year of life to infants who have any hazards to health and who will not receive necessary care for economic and other reasons. | *Low-income infants or others who will not receive necessary care because of reasons beyond control. | | *Federal funding up to 75% of cost. Remainder from State and local funds and certain other public funds.<br>**State and local health agencies, public or nonprofit agencies, institutions, or organizations. | $450,000 (71)<br>$753,000 (72) |
| Maternity & Infant Care Projects Maternal & Child Health Service, HSMHA, HEW 1967 13.234 | a | | *Pre-natal, delivery and post-natal care to help reduce maternal and infant mortality and morbidity and mental retardation. | *Low-income mothers and their infants. | | *Federal grants cover up to 75% of cost of providing maternity services. Remainder covered through matching funds.<br>**State and local health agencies and other public or non-profit private agencies, institutions, organizations. | $38.6 (71)<br>$42.7 (72) |
| | | | | | | | |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Maternal and Child Health Services Maternal & Child Health Services, HSMHA, HEW<br>1967<br>13.232 | a | | *Extend and improve services to reduce infant mortality and otherwise improve health of target population. | *Mothers and infants. | | *Totally Federally funded on basis of number of live births, per capita income and rurality. Direct to State health agencies, which are the only eligible agencies.<br>**State health agencies. | $ 59.2 (71)<br>$ 59.25 (72) |
| Crippled Children's Services Children's Bureau, SRS of HEW<br>1967<br>13.211 | a | | *Extension and improvement of services to crippled children. Includes locating such children and providing medical services and facilities. | *Crippled children,<br>**448,700. | | *Totally Federally funded on basis of number of live births, per capita income and rurality. Restricted to one agency per state.<br>**State health agencies and other agencies. | $ 58.6 (71)<br>$62.3 (72) |
| Special Projects for Health Care of Children and Youth Maternal & Child Health Division, HSMHA of HEW<br>1967<br>13.218 | a | | *Financial support for health care and services to children of school and pre-school age, particularly in areas of concentration of low-income families. | *Pre-school and school age children from low-income families.<br>**220,000. | 10% | *Maximum 75% of cost of providing services. · Direct to grantees.<br>**State and local health departments, medical schools and hospitals, State crippled children agencies. | $ 43.8 (71)<br>$ 47.4 (72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Community Action Program-Family Planning HSO,CAP,OEO 1964 amended 49.006 | b | | *To provide grants to make available family planning services to low income communities. | *Low income communities. | | *Federally funded to unit which provides organizational base and commonality of interested people.<br>**Any public or private nonprofit agency (hospitals, medical schools, community organizations, etc.) | $ 18.8 (71)<br>$ 24.0 (72) |
| Community Action Program - Emergency Food & Medical Services Chief of Emergency Food, OEO 1964 amended 49.005 | a | | *Provides grants to make available on a temporary basis foodstuffs and medical services to counteract starvation or malnutrition. | *High-risk population groups. | | *Federally funded to unit which provides organizational base and commonality of interested people.<br>**CAA or delegated to local agency. | $ 48.6 (71)<br>$ 3.5 (72) |
| Community Action Program - Comprehensive Health Services HSO, ,OEO 1964 amended 49.003 | a | 2 | *Comprehensive healthcare to low-income persons in areas having high concentrations of poverty & inadequate health services. | *Low income communities. | | *Federally funded to unit which provides organizational base and commonality of interested people.<br>**Any public or private nonprofit agency. Usually independent, delegate agencies of CAA. Hospitals, medical societies and schools, etc. | $ 98.70 (71)<br>$108.20 (72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Direct Food Distribution Food & Nutrition Service USDA<br>10.550 | a | | *Improve nutrition of school children & families in need of food assistance, increase market for domestically produced food under surplus and price support. | *Low-income families and school children (families are eligible if they are found by officials to need food assist., are receiving welfare assist. and have no or limited income. Families not on welfare assist. may be considered individually.) | | *Federal funds pay for food, processing, packaging and interstate trans. State & local gov. pay for storage, intra-state trans. and distribution. Federal gov. will pay some costs for low-income counties.<br>**Donations to any needy group or individual - public or private nonprofit institutions. | $564.3 (71)<br>$598.9 (72) |
| Non-school Child Nutrition Program Special Food Service Program for Children, Food & Nutrition Service USDA 1968 10.552 | a | | *Pilot grants to improve child nutrition, year round. | *Children in service institutions (day) | | *Federal government basic grant of not more than $50,000 to each State. Remainder apportioned by a formula.<br>**Public and nonprofit private institutions. | $ 20.97 (71)<br>$ 49.00 (72) |
| School Lunch Program Food & Nutrition Service USDA 1966 10.555 | a | | *Commodity and cash grants to assist in providing adequate school lunches. | *School-age children. | | *Federal government basic grant of not more than $50,000 to each State. Remainder apportioned by a formula.<br>**State educational agencies, to public and nonprofit private schools. | $599.3 (71)<br>$861.3 (72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Project Grants for Health Services Development Community Health Service, HSMHA, HEW<br>13.224 | | | *Services to meet health needs of limited geographic region or in development or support of new programs.<br>**Staff training. | *Communities. | | *Joint and coordinated Federal funding and contributions from communities; use of existing resources.<br>**Public and nonprofit agencies, institutions and organizations. | $108.8<br>(71)<br>$125.2<br>(72) |
| Child Health & Human Development - Training Grants NICHO, NIH, HEW<br>13.318 | b | | *Staff training to increase the supply of trained scientists, teachers and physicians in basic and clinical sciences related to child health and human development. | *General population. | | *Federally financed training grants directly to grantee.<br>**Qualified nonprofit institutions. | $ 10.45<br>(71)<br>$ 10.14<br>(72) |
| Child Health & Human Development - Fellowships NICHO, NIH, HEW<br>13.316 | b | | *Staff training of scholars for research and academic careers in basic clinical sciences related to child health, human development, and the aging process. | *General population. | | *Federally financed post-doctoral fellowships directly to individuals.<br>**Qualified individuals. | $ 3.98<br>(71)<br>$ 3.79<br>(72) |
| | | | | | | | |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Maternal and Child Health Training<br>HSMHA, HEW<br>1967<br>13.233 | a |  | *Provides staff training to support state and local efforts in various fields, pertaining to child and maternal health. | *Children, especially multiple handicapped who are retarded.<br>**Among others, 406 long-term, 323 short-term trainees. |  | *Federally funded. Direct to unit providing service.<br>**Mostly university affiliated centers, State health agencies and crippled children's agencies. | $ 11.2<br>(71)<br>$ 15.1<br>(72) |
| Medical and Allied Health Services Training<br>Dept. of Med. and Surgery<br>VA<br>64.003 | b |  | *Provide clinical training to physicians, dentists, graduate students in health fields, nursing, etc. | *General population (medical problems) |  | *Federally funded. Direct to invidual or for miscellaneous educational costs.<br>**VA hospitals. | $103.1<br>(71)<br>$118.3<br>(72) |
| Developmentally Disabled Initial Staffing of Community Facilities<br>RSA,SRS,HEW<br>13.715<br>Now under 13.759, Developmental Disabilities Special Projects. | b |  | *Pay part of cost of compensation of professional and technical personnel for initial staffing of new community facilities or new services in existing facilities. | *Mentally retarded.<br>**26,000 |  | *Maximum 75% for first 15 months; 60% for next 12; 45% next 12, 30% last 12. Direct to agency. For Professional and technical personnel.<br>**Public or nonprofit facilities, either new or providing new services. | Total for 13.759<br>$ 44.5<br>(71)<br>$ 54.9<br>(72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Rehabilitation Service Projects for the Developmentally Disabled<br>Rehabilitation Services Adm., SRS, HEW<br>13.718 now under 13.759, Developmental Disabilities Special Projects. | a | | *Support services to meet special needs in community; improved service coordination and manpower recruitment. | *Mentally retarded in community. | | *Direct Federal financial assistance for staff, equipment, etc. with grantee participation to a minimum of 5%.<br>**Public and nonprofit agencies and institutions. | Total for 13.759<br>$ 44.5 (71)<br>$ 54.9 (72) |
| Mental Retardation Commun. Facilities Construction<br>Rehab. Serv. Admin., SRS, HEW<br>Subsumed under 13.759, Developmental Disabilities Special Projects | b | 3 | *Construction of community facilities for diagnosis and treatment, education, training and custodial care. | *(Mentally retarded) | | *Formula grant with minimum of $100,000 for any State each fiscal year. Federal share may range from 1/3 to 2/3 of construction costs.<br>**Public agencies and nonprofit private organizations admin. through State agency. | Total for 13.759<br>$ 44.5 (71)<br>$ 54.9 (72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. APPROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Mental Retardation-University-Affiliated Facilities Rehab. Serv. Admin.,SRS, HEW<br>Subsumed under 13.759, Developmental Disabilities Special Projects | b | | *Support for construction of university-affiliated clinical facilities for training specialists and providing services for the mentally retarded. | *Mentally retarded. | | *Federal grant to cover not more than three-fourths of construction cost. Payments in form of advances, reimbursements, or installments.<br>**Public and nonprofit private agencies sponsoring facilities owned by or affiliated with a university or college. | Total for 13.759<br>$ 44.5 (71)<br>$ 54.9 (72) |
| Experimental & Special Training Projects in Mental Health Experimental & Special Training Bureau, MTP, NIMH 1946 amended | b | 2 | *Experimental and special training projects involving persons whose roles or functions may be related to mental health.<br>**Increase personnel for day care centers. | *General population-mental health problems. | | *Federally funded. Direct to program.<br>**Innovative program. | $ 3.0 (71) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Staffing of Community Mental Health Centers<br>NIMH, HSMHA<br>HEW<br>1963<br>13.240 (part of) | b | 2 | *Help meet initial cost of professional and technical personnel to provide new mental health services in community mental health centers. | *General population-mental health problems. | | *Maximum 75% of eligible technical and personnel costs in first 15 months, 60% next 12, 40% next 12, 30% last 12. Direct from NIMH to agency.<br>**Public and private nonprofit community health centers which have 5 essential services. | $ 90.0<br>(71)<br>$135.1<br>(72) |
| Mental Health Continuing Education Programs<br>Cont. Ed. Branch, Div. of Manpower & Training Programs, NIMH<br>1946 amended<br>13.244 (part of) | b | 2 | *Support continuing education programs which foster mental health professional education and provide training in specialized areas. | *General population-mental health problems. | | *Federal, though liason maintained with State and other Federal agencies. Funds not generally provided for trainees stipends or fees.<br>**Any public or private nonprofit institution. | Undetermined portion of $116 mill of NIMH |
| Mental Health Training Grants<br>INIMH,HSMHA, HEW<br>13.244 | b | 2 | *Professional-level staff training in the mental health disciplines. | *General population-mental health problems. | | *Federally financed grants for training directly to institutions.<br>**Colleges, universities and other training institutions. | $107.0<br>(71)<br>$111.35<br>(72 |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. APPROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Maternal & Child Health Research Maternal & Child Health Service, HSMHA, HEW<br>13.231 | b | | *Grants to support research projects relating to maternal and child health services or crippled childrens services. | *Mothers and children, crippled children. | | *Federal grants directly to organization, agency or institution for specific research projects. Required cost sharing with non-Federal funds.<br>**Public or other nonprofit institutions of higher learning and agencies or organizations engaged in research or maternal and child health activities. | $ 5.74 (71)<br>$ 6.04 (72) |
| Child Health & Human Development - Collaborative Research & Development Contracts NICHO, NIH, HSMHA, HEW<br>? | b | | *Supports research contracts in the fields of biological, behavioral, and clinical sciences. | *General population. | | *Federally financed research contracts directly to grantees.<br>**Universities, colleges, medical, dental and nursing schools, schools of public health, laboratories, hospitals, State and local health departments, other public or private nonprofit or profitmaking institutions. | $ 14.7 (71) |
| Child Health & Human Development-Research Grants NICHO, NIH, HSMHA, HEW<br>13.317 | b | | *Support research in areas related to maternal health, child health, human growth and development, and the aging process. | *General population. | | *Federally financed research grants directly to grantees.<br>**Universities, colleges, medical, dental and nursing schools, schools of public health, laboratories, hospitals, State and local health departments, other public or private nonprofit institutions and individuals. | $ 45.87 (71)<br>$ 59.86 (72) |
| | | | | | | | |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. APPROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Mental Health Research Grants<br>NIMH, HSMHA, HEW<br>13.242 | b | | *Support research in all areas of mental health. | *All eligible members of the population (mental health)<br>**Supported over 2,000 research projects. | | *Federally funded. Direct to agency.<br>**Nonprofit public or private agencies, including local, State or regional government agencies, institutions, schools and laboratories. | $74.4<br>(71)<br>$82.5<br>(72) |
| Mental Retardation Research<br>RSA,SRS, HEW | b | | *Support research designed to discover and develop new knowledge and techniques, and to gather information for the increased efficiency of services. | *Mentally retarded. | | *Direct financial assistance for staff, equipment, etc. With a minimum of 5% cost sharing.<br>**Public and nonprofit agencies, institutions, individuals, organizations. | $897,000<br>(71)<br>$ 1.0<br>(72) |
| General Clinical Research Centers<br>NIH, HSMHA, HEW<br>1960<br>13.333 | b | | *To create and sustain, on a stable basis, highly specialized institutions for the study of human diseases. | *All eligible members of population (physical health)<br>**93 centers in 63 medical schools. | | *Direct Federal funds pay costs of renovation, equipment, salaries of nurses, technicians, and other operational costs. Salaries for research scientists and cost of studies to be supported from other sources.<br>**Private or nonprofit private medical schools. | $38.0<br>(71)<br>$42.3<br>(72) |
| | | | | | | | |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Mental Health Fellowships NIMH, HSMHA, HEW<br>13.241 | b | | *Support research in mental health and related disciplines in appropriate institutions.<br>**Staff training. | *All eligible members of population (mental health).<br>**1,100 fellowships awarded in 1970. | | *Federally funded. Direct to individual.<br>**Given to individuals who are sponsored by institutions with adequate facilities. | $ 8.7 (71)<br>$ 8.7 (72) |
| Housing and Urban Environmental Health PHS, CPEHS, HEW | b | | *To promote man's health and well-being in environment, from housing and recreation to Arctic health, by means of research grants, technical assistance and fellowships. | *General population | | *Directly Federally funded (research grants, technical assistance and fellowships directly to institutions)<br>**Academic, public and nonprofit institutions. | $ 3.0 - research<br>$10.0 - operations<br>$600,000 training<br>Up To Present: $14.0 |

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Food and Nutrition Research - Agricultural Research--Basic and Applied<br>ARS, USDA<br>1862, 1946<br>10.001 | b | | *Develop new knowledge about human nutrition, better use of food and effective household management. | *General population. | | *Directly Federally funded.<br>**Intramural plus a few grants to State, universities, and research laboratories. | $ 4.24 (71)<br>$ 4.40 (72) |
| Food Research Grants<br>FDA, HEW<br>13.103 | b | | *Controlling health hazards associated with food and milk and interstate travel. | *General population. | | *Federally funded direct to grantee.<br>**Academic, public and other non-profit institutions. | $ 3.0 (71) |
| Dental Research Grants<br>NIH, HEW<br>13.325 | b | | *Support research on dental problems, clinical and nonclinical. | *General population. | | *Federally funded direct to grantees.<br>**Universities, hospitals, laboratories, public and private institutions, and individuals. | $ 16.86 (71)<br>$ 21.5 (72) |
| Food Stamp Program<br>Food and Nutrition Service, USDA<br>1964<br>10.551 | a | | *Improve diet of low-income households by supplementary food purchasing power. | *Low-income households. | | *Federally funded to State which distributes it.<br>**Local political subdivisions which apply through State agency. | $1.52 bill (71)<br>$1.997 bill (72) |
| | | | | | | | |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| School Lunch Program - Nonfood Assistance Program (Equipment)<br>Food and Nutrition Service, USDA<br>1966<br>10.554 | a | | *Supply schools in low-income areas with equipment for storing, preparing, transporting, serving food. | *Low-income school-age children. | | *State or local funds must pay minimum of 25%.<br>**Public and nonprofit private high schools and grade schools. | $ 37.16 (71)<br>$ 16.11 (72) |
| School Breakfast Program<br>Food and Nutrition Service, USDA<br>1966<br>10.553 | a | | *Provide cash grants to provide breakfast to improve child nutrition. | *School-age children | | *State educational agencies contract with schools. Each State receives a basic grant, and the remainder is distributed according to a formula. In cases of extreme need, the grant may provide up to 80%.<br>**Public and nonprofit private elementary and high schools. | $ 20.16 (71)<br>$ 31.00 (72) |
| Special Feeding Program - Section 32 (Child Feeding Program)<br>? | a | | *Provide additional food assistance for free and reduced price breakfasts, lunches, short-term equipment and State level administration costs. | *Needy children and persons suffering from general and continued hunger. | | *Grant to States with remainder distributed according to formula (maximum 25¢/lunch, 15¢/breakfast)<br>**Public agencies and schools. | $156.0 (71) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Special Milk Program<br>Food and Nutrition Service, USDA<br>1966<br>10.556 | a | | *Reimbursement payments to encourage inauguration or expansion of service of offering free or reduced price milk. | *All school-age and under children. | | *Each State receives a basic grant. Remainder distributed according to a formula. Excess costs must be covered by sources within State.<br>**State educational agency to public nonprofit High School grades and under, nursery schools, child care centers, settlement houses, summer camps, etc., which provide for care and training of child. | $ 92.64<br>(71)<br>$103.28<br>(72) |
| Construction of Community Mental Health Centers<br>NIMH, HSMHA, HEW<br>1963<br>13.240 (part of) | b | | *Finance construction of new buildings, remodeling or expansion of existing buildings, as community mental health centers. | *(Mentally ill) | | *Federal grants of 33-1/3% - 66-2/3% of cost to programs with State approval.<br>**Private, nonprofit organizations and State and other public agencies. | $ 23.7<br>(71)<br>$ 5.2<br>(72) |
| Mental Health Hospital Improvement Grants<br>NIMH, HSMHA, HEW<br>1963<br>13.237 | b | | *Improve care, treatment and rehabilitation, specialized support projects for patient groups (including children) and demonstration projects. | *State mental hospital patients. | | *Federal project grants for a period up to 10 years, at no more than $100,000 in any one year, to State approved programs.<br>**State hospitals for mentally ill administered by State agency responsible for mental hospitals and any other part of State's formal system of care-taking for the mentally ill. | $ 6.9<br>(71)<br>$ 6.9<br>(72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Educationally Deprived Children-Indian Children<br>BIA, USDI<br>Title I | | 4 | *To meet special needs of educationally deprived Indian children. Includes many services, teacher training, and other activities to overcome learning disabilities. | *Indian children in BIA schools<br>**All Title I serves 9 million students | | **BIA schools | $ 12.0 (71) |
| Educationally Deprived Children-Migratory Children<br>OE, HEW<br>Title I<br>13.429 | | 4 | *Assist states in educating migratory children by establishing or improving programs<br>**Day-care centers, health programs, food programs, other services | *Migratory children of migrant workers<br>$228,000 (70) | | *Payments made to State educational agencies. State projects must not be inconsistent with overall State plans, and must guarantee to evaluate projects yearly. If plan approved, State is entitled to a grant<br>**State educational agencies | $ 54.6 (71)<br>$64.8 (72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Educationally Deprived Children-Special Grants for Urban and Rural Schools<br>OE, HEW<br>Title I (Part C)<br>1971<br>13.511 |  | 4 | *To meet special educational needs of educationally deprived children, concentrating on pre-school and elementary programs | *Educationally deprived children<br>**All Title I serves 9 million students |  | *State grant issued on a county basis to State educational agency. State must approve local programs. Eligible districts will have at least 20% of children 5-17 counted for payment under Title I-Part A, or at least 5,000 children and 5% of such children will be in county. Allocation to each county based on number of children 5-17 from families with less than $2,000 annual income. Number of AFDC children, number of children in institutions for neglected, times 1/2 the state or national (whichever is greater) average expenditure per pupil. No matching requirements.<br>**Local educational agencies | $ 15.4 (71)<br>$ 24.8 (72) |
| Educationally Deprived Children--Special Incentive Grants<br>OE, HEW<br>Title I (Part B)<br>1971<br>13.512 |  | 4 | *To provide an incentive for increase in state and local funding for elementary and secondary education in the State. | *Educationally deprived children.<br>**All Title I serves 9 million students |  | *A state educational agency is entitled to a grant if the state "effort index" for second preceeding fiscal year exceeds national "effort index". Effort index is a measure of relative expenditure for public elementary and secondary school education by a state in comparison to total personal income in the state. May not exceed 15% of total amount available under Title I (Part A) State receives $100/eligible child for each 1/100 of 1% by which it surpasses the national effort index.<br>**Local educational agencies having greatest need | $ 6.3 (71)<br>$ 7.3 (72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Educationally Deprived Children Local Educational Agencies Division of Compensatory Education, OE, HEW 1965 13.428 | c | 1 | *Provide special educational assistance for children whose level of educational achievement is below normal for their age and to help them overcome learning barriers. | *Educationally disadvantaged children in low-income areas (counties with at least 70 children aged 5-17 from families with income under $2,000 -excluding aid for dependent children and children living in institutions) for the neglected and delinquent and publicly supported foster homes. |  | *Federal funds must supplement, not substitute for, State and local money for education in the school district. State education agency approval required.<br>**Local public agencies providing free public education. | $1.339 bil (71)<br>$1.406 bil (72) |
| Educationally Deprived Children - State Administration Div. of Compensatory Education, OE, HEW<br>13.430 | b |  | *Administrative assistance in program development and review, evaluation and demonstration. | *Educationally disadvantaged children. |  | $150,000 minimum Federal funds for States (through State educational agency), $25,000 minimum for District of Columbia, Guam, Puerto Rico, Trust Territory of the Pacific, and the Virgin Islands. Additional funds available.<br>**State educational agencies. | $ 16.6 (71)<br>$ 17.0 (72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Educationally Deprived Children in Institutions for the Neglected or Delinquent Div. of Compens. Education., OE, HEW<br>13.431 | b | 1 | *Establish, expand and improve programs designed to meet educational needs. | *Children in state institutions for neglected or delinquent. | | *Grants available to state parent agencies through state educational agency.<br>**State or local institutions. | $ 18.2 (71)<br>$ 20.2 (72) |
| War Orphans and Widows' Educational Assistance Dept. of Veteran's Benefits, VA<br>64.117 | a | | *To provide education to children which would have been impeded or interrupted by disability or death of a parent incurred in Armed Forces, or prepare wives to support themselves at standard of living to which they are accustomed. | *War orphans' and widows'. | | *Direct to individual. Cannot exceed 36 months or $130/month.<br>**Educational institutions. | $ 70.64 (71)<br>$ 74.77 (72) |
| Programs for the Disadvantaged - Special Services in College Div. of Student Spec. Services, BHE, OE, HEW<br>1968<br>13.482 | b | 2 | *To provide for remedial and other special services to enable disadvantaged students with potential to initiate, resume or continue secondary education. | *Disadvantaged (educationally, culturally, economically, physically) college students. | | *Direct to institutions to operate special services in college projects.<br>**Colleges. | $ 15.0 (71)<br>$ 15.0 (72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. APPROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Higher Education Act Insured Loans - Guaranteed Student Loan Programs<br>Div. of Student Financial Aid, BHE, OE,HEW<br>1966<br>13.460 | b | | *Low-interest, long-term loans to help pay for higher or vocational education. | *Students<br>**750,000 loans in 1969. 19,000 participating lenders. | | *Federal government pays portion of interest on behalf of student (if family's income is less than $15,000) and covers losses from student defaults.<br>**Agencies of a State or financial or credit institutions approved by Commission of Education. | $143.9 (71)<br>$197.3 (72) |
| Programs for the Disadvantaged - Upward Bound<br>Div. of Student Special Services, BHE,OE,HEW<br>1968<br>13.492 | c | 2 | *Generate skills and motivation necessary for success in education beyond high school for enrollees from low-income backgrounds and inadequate secondary educations. | *High school students from low-income and educationally inadequate backgrounds.<br>**26,000 students. | | *Enrollees receive stipend $30/month. Maximum Federal contribution to an institution is $1,440 per enrollee per year.<br>**Institutions (approved by Office of Education) of higher education. In exceptional cases secondary schools accredited by State. | $ 28.5 (71)<br>$ 31.0 (72) |
| | | | | | | | |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. APPROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Programs for the Disadvantaged - Talent Search<br>Div. of Student Special Services, BHE,OE,HEW<br>1968<br>13.488 | b | 2 | *To support activities that establish relationships with youth of exceptional financial need to motivate them toward continuation of their education at secondary and higher levels. | *Students.<br>**62 projects in 39 states in 1969. | | *Contracts directly awarded to institutions in accordance with regulations determined by the Commissioner. May work in specific areas, statewide, or deal with minority groups.<br>**State or local educational agencies or public or nonprofit agencies or institutions. | $ 5.0 requested for '71<br>$ 5.0 (72) |
| Adult Basic Education - Grants to States<br>Div. of Adult Ed. Program,OE, HEW<br>1966 amended<br>13.400 | b | 2 | *Basic education for undereducated adults through local public and private nonprofit educational offices. | *Adults 16 years and over, with less than an 8th grade level of competency in basic communications and computational skills. | | *State receives direct grants for programs approved by OE to operate programs through local agencies. Each State receives $150,000 base, an additional fund may be apportioned based on number of high school graduates. These grants represent 90% of total costs, with State and local agencies providing 10% matching funds. Also $10 million available to colleges for programs.<br>**Local public and private nonprofit educational agencies. | $ 45.0 (71)<br>$ 51.1 (72) |
| Adult Education Courses BIA -Dept. of Interior<br>15.100 | b | 2 | *Provide, train and coordinate staff and programs to American adult Indians on reservations in order that they have education opportunities to meet their basic educational needs.* | *Any adult American Indian living on a reservation. | | *Directly Federally funded.<br>**Adult educators through educational programs. | $ 1.638 (71)<br>$ 1.681 (72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Child Development - Technical Assistance Office of Sec.,HEW<br>1969<br>13.601 | b | 3 | *Coordination and advocacy for children's services. Provides technical assistance and is an interagency effort to coordinate day-care services at State and local levels. | *All children. | | *No grants - provides assistance and attempts to bring together resources of all interested child-care programs in a community.<br>**State and public and nonprofit private organizations involved in child services. | $ 1.4<br>(71)<br>$ 2.4<br>(72) |
| Child Welfare Services SRS, HEW<br>13.707 | b | | *Establish, extend and strengthen child welfare services provided by State and local public welfare agencies. | *Homeless, dependent or neglected children or potential delinquents - priority to low income and physically and socially disadvantaged group. | | *Each State receives a grant of $70,000 and an additional grant based directly on child population under 21 and inversely with average per capita income. Programs jointly developed by the single State agency responsible for child-welfare services and regional representative, subject to approval by regional SRS commissioner.<br>**One State agency per state distributes grant according to plan. | $ 46.0<br>(71)<br>$ 46.0<br>(72) |
| Public Assistance - Social Services to Recipients of Aid to the Blind Reh. Serv. Adm.,SRS,HEW<br>1935 amended<br>13.754 (part of) | | | *Enable aid-to-blind recipients to gain independence to fullest extent of capacity. Includes mobility instruction, communication skills, daily living, home management. | *The needy blind (not just financially)<br>**656,000 ch. up to 1968: 142,000 foster homes; 1,400 ch. institution; 640 group homes; 635,000 ch. in day-care programs. | | *State agency receives 50 or 75% matching funds according to SSA through welfare department for a Federally approved plan.<br>**State agencies. | Open-ended<br>$ 3.6<br>(71)<br>all 13.754<br>$692.0<br>(71)<br>$838.0<br>(72) |

PY AVAILABL

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Child Welfare Training<br>SRS, HEW<br>1963<br>13.708<br>Now under 13.758 Comprehensive Social and Rehabilitation Training | b | 2 | *Provide pool of trained personnel for child welfare activities. | *Children.<br>**142 faculty, 120 short-term projects, 1,052 Master's degrees - since 1963 | | *Provides teaching grants, traineeships and short-term training activities. Directly Federally funded to institution; applicant is expected to contribute as much as possible.<br>**Schools of social work, other public and private educational institutions. | $ 5.9<br>(71)<br>all 13.758<br>$ 35.7<br>(71)<br>$ 44.6<br>(72) |
| Social Services - Training in Social Work Manpower,<br>SRS, HEW<br>1969<br>Now under 13.758 Comprehensive Social and Rehabilitative Training | | 4 | *To develop, expand and improve undergraduate programs in social work and programs for graduate training of professional social work personnel by paying costs of additional faculty and personnel. | *General population (receiving social work services) | | *Applicant must be accredited by proper body and it is expected applicant will contribute at least 10% of costs for programs.<br>**Undergraduate colleges, undergraduate programs in universities, graduate schools of social work. | $ 3.0<br>(71)<br>all 13.758<br>$ 35.7<br>(71)<br>$ 44.6<br>(72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. APPROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Public Assistance - Social Services to Recipients of Aid to Families with Dependent Children Office of Child Development, HEW<br>13.754 (part of) | b | 2 | *Maintain and strengthen family life, assist in efforts to achieve self-support and personal independence and foster child development. | *Families. | | *Federal funds cover 75% of cost of services rendered to individual by State or local welfare agencies included in State plan. Costs for training staff to provide services also included. Funds spent on basis of Federally approved State plan.<br>**Families on AFDC who have been on AFDC or who are potential recipients through State or local agency. | $509.0 (71)<br>all 13.754<br>$692.0 (71)<br>$838.0 (72) |
| Indian Child Welfare Assistance Off. of Comm. Serv., BIA, Div. of Int.<br>15.103 | a | | *Child welfare assistance and counseling: home care, institutional care and adoption.<br>**Help to parents in selecting suitable day-care and reimbursement. | *Indian children who are dependent, neglected and handicapped.<br>**3,300 children (average) FY 1970 | | *Budget is based upon individual reservation requests and is disbursed accordingly. Child and parents must be in need of assistance to secure appropriate care.<br>**Bureau agency on or near reservation. | $ 4.48 (71)<br>$ 5.10 (72) |
| Foster Grandparents Program ACTION agency<br>72.001 | a | | *To recruit and train persons with low incomes, over 60, to serve children who can benefit from close relationships with adults.<br>**To develop new service roles for older Americans. | *Neglected, handicapped deprived children (up to 16 yrs. of age) and men and women 60 and over with incomes below poverty level and an interest in children. | | *Grants up to 90% to public or nonprofit private agencies or organizations with preferences given to CAA's. Foster grandparents receive minimum wage for 20 hours per week plus transportation. Host institution provides space plus consultants.<br>**Public or nonprofit private agencies, CAA's. | $ 10.4 (71)<br>$ 23.88 (72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATE (FY) (millions |
|---|---|---|---|---|---|---|---|
| Child Welfare Research and Demonstration Grants Program Children's Bureau, SRS, HEW<br>13.706<br>Now under 13.757 Comprehensive Social and Rehabilitation Research | b | | *To support research projects relating to child welfare, for demonstrations of regional or national significance and special projects. | *Children. | | *Grantees are required to share in the costs of projects in actual cash outlay or deduction from indirect costs.<br>**State and public or other nonprofit agencies. | $ 8.5 (71)<br>all 13.757<br>$ 46.3 (71)<br>$ 64.0 (72) |
| Rehabilitation Research and Training Centers (Special Center Program) Research & Training Centers Div., SRS, HEW<br>1965<br>13.729<br>Now under 13.757 Comprehensive Social and Rehabilitation Research | a | 1 | *Establish rehabilitation and training centers (medical, vocational, mentally retarded, deaf) to discover knowledge and techniques of rehabilitation. | *Eligible population.<br>**12 medical rehab. centers, 3 vocational centers, 3 ment. retar. centers; 678 research studies; 32,000 people in courses. | | *Direct to centers. Programs must have approval of State vocational rehabilitation agency, SRS regional office, National Advisory Council on Vocational Rehabilitation. Pays part of cost of programs.<br>**Universities, State or private nonprofit institutions having comprehensive rehabilitation facilities. | $ 10.2 (71)<br>all 13.757<br>$ 46.3 (71)<br>$ 64.0 (72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Rehabilitation Research and Demonstration Grant Program<br>Office of Research, Demonstration and Training, SRS, HEW<br>1955<br>13.728<br>Now under 13.757 Comprehensive Social and Rehabilitation Research | a | | *Provide more and better rehabilitation of handicapped, enable optimal vocational adjustment through innovative research and demonstration. | *Handicapped persons | | *Grants awarded for partial support of research and demonstration projects. Some degree of cost sharing is required.<br>**State vocational rehabilitation agency, other public agencies, educational institutions and other nonprofit organizations. Applicants must have received or applied for tax exemption from the IRS. Applicants must have approval of State vocational rehabilitation agency for projects involving direct rehabilitation services. | $ 22.3<br>(71)<br>all 13.757<br>$ 46.3<br>(71)<br>$ 64.0<br>(72) |
| Social Welfare Cooperative Research and Demonstrations - Directed Research<br>Office of Research, SRS, HEW<br>1967<br>Now under 13.757 Comprehensive Social and Rehabilitation Research | b | | *Research development and evaluation relating to policies, programs and issues affecting the agency. In-house contract work. | *General population | | *Contracts go to organizations on a standard bidding basis. Proposals reviewed by experts.<br>**State, public, nonprofit or profit-making institutions. | $ 6.5<br>(71)<br>all 13.757<br>$ 46.3<br>(71)<br>$ 64.0<br>(72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Social Welfare Cooperative Research and Demonstrations - Research Grants (1110 projects)<br>SRS, HEW<br>13.739<br>Now under 13.757 Comprehensive Social and Rehabilitation Research | b | | *Support agency mission of reducing dependency and promoting human welfare by coordinating of planning between public and welfare agencies. | *General population (recipients of SSA legislation)<br>**40 grants dealing with racial problems, retirement problems and others. | | *Application renewed by panel designated by SSA. Financial matching of 5%, cannot go to individual.<br>**State and public and other non-profit organizations. | $ 1.75<br>(71)<br>all 13.757<br>$ 46.3<br>(71)<br>$ 64.0<br>(72) |
| Public Assistance - Demonstration Projects<br>Office of Research, SRS, HEW<br>13.723<br>Now under 13.757 Comprehensive Social and Rehabilitation Research | b | | *To conduct experimental, pilot and demonstration projects in public assistance to improve methods of administering assistance to help persons achieve self-support or maintain family life. | *Eligible population<br>**115 projects since inception. | | *Given directly to State welfare agencies. No matching funds requirement.<br>**State public welfare agencies. | $ 4.0<br>(71)<br>all 13.757<br>$ 46.3<br>(71)<br>$ 64.0<br>(72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Handicapped Preschool and School Programs<br>OE, HEW<br>1965<br>13.449 | a | 1 | *To assist States in provision of special educational programs for handicapped children at preschool, elementary and secondary level. | *Mentally retarded, hard of hearing, deaf, seriously emotionally disturbed, and other handicapped children.<br>**53,700 (1968) | | *Nonmatching State formula grants on basis of ratio of population of 3-21 year olds to national 3-21 year old population. Funds given directly to State for local and State programs Federally approved. In order to be eligible, a State must spend at least as much as it did the fiscal year before on such programs.<br>**Only State and local education agencies. | $ 34.0<br>(71)<br>$ 37.5<br>(72) |
| Handicapped Innovative Programs - Deaf-Blind Centers<br>Bureau of Educ. for Handicapped, OE, HEW<br>1969<br>13.445 | b | 1 | *Develop model centers providing comprehensive diagnostic and evaluative services, educational programs and consultative services. | *Blind-deaf children, their parents, teachers, and others concerned. | | *Funds to plan, develop and operate centers are awarded directly to groups meeting requirements of act and the deaf-blind "policies and procedures,"<br>**Public and nonprofit private agencies, organizations and institutions. | $ 4.5<br>(71)<br>$ 7.5<br>(72) |
| Educationally Deprived Children - Handicapped Children in State-Supported Schools<br>Bureau of Educ. for Handicapped, OE, HEW<br>1969<br>13.427 | a | 1 | *Assist State agencies that are directly responsible for providing free public education. | *Handicapped children. | | *Grant determined by formula based on number of children in average daily attendance. Number is multiplied by 1/2 State average cost per pupil (or the national average cost per pupil - whichever is greater) to determine maximum grant.<br>**State educational agencies. | $ 46.1<br>(71)<br>$ 56.4<br>(72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. APPROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Handicapped Regional Resource Centers<br>Bureau of Ed. for Handicapped, OE, HEW<br>1969<br>13.450 | a | 1 | *Regional resource centers for handicapped children to provide diagnostic, evaluative, program planning and prescriptive educative services to teachers of handicapped children. | *Handicapped children | | *Federal grant or contract directly to agency or institution.<br>**State education agency and/or institutions of higher learning. | $ 3.55<br>(71)<br>$ 3.55<br>(72) |
| Books for the Blind and the Physically Handicapped<br>Library of Congress<br>42.001 | a | 1 | *Provide library services to blind and physically handicapped. | *Blind and physically handicapped. | | *Applicants supplied directly with braille books or tapes.<br>**Library of Contress or regional library for blind and physically handicapped. | $ 7.65<br>(71)<br>$ 8.56<br>(72) |
| Educational Materials for the Blind<br>American Printing House for the Blind<br>1879 amended<br>? | a | 1 | *Provide manufacture and distribution of educational materials. | *Visually handicapped (pre-college)<br>**20,509 | | *States register number of visually handicapped, and a per capita allotment is reached by dividing number into total appropriation. Each State then free to order materials.<br>**Public educational facilities. | $ 1.4<br>(71)<br>$ 1.5<br>(72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Media services and Captioned Films Division of Educational Services, Bureaus of Education for Handicapped, OE, HEW<br>13.446 | a | 1 | *Provide cultural and educational services to the handicapped through films and other media. | *Physically handicapped<br>**100 films reached 1,143,638 people | | *Contracts based on significance and soundness of proposal. May cover up to 100%--given directly.<br>**Educational institutions, private, profit or nonprofit organizations. | $ 6.0<br>(71)<br>$ 6.0<br>(72) |
| Handicapped Teacher Education Bureau of Education for Hand.-capped, OE, HEW<br>1963<br>13.451 | b | | *Providing financial assistance to individuals interested in pursuing careers in the education of handicapped children and the development of preparation programs for such programs. | *Handicapped children<br>**260 programs 32,000 to graduate | | *State education agencies eligible for not less than $50,000, nor more than $200,000 depending on population factors. No matching requirements. Program development reimbursed for direct costs, special projects for direct costs and 80% of that for indirect<br>**State educational agencies, institutions of higher education | $ 31.9<br>(71)<br>$33.9<br>(72) |
| Handicapped Physical Education and Recreation Training Bureau of Education for Handicapped, OE, HEW<br>1969<br>13.448 | b | | *Training physical educators and recreation personnel working with handicapped children. | *Handicapped children | | *Direct grants to colleges and universities for programs of planning and program development during the academic year. Limited support for summer programs.<br>**Institutions of higher learning. | $700,000<br>(71)<br>$700,000<br>(72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. APPROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Handicapped Teacher Recruitment and Information<br>Bureau of Education for the Handicapped, OE, HEW<br>1969<br>13.452 | b | | *Improve recruiting of personnel and dissemination of information on educational opportunities for the handicapped. | *Handicapped children | | *Contracts covering up to 100% of project cost awarded directly to organization or institution<br>**Public and/or private agencies and organizations | $ 0.5<br>(71)<br>$ 0.5<br>(72) |
| Handicapped Research and Deomonstration<br>Bureau of Education for the Handicapped, OE, HEW<br>13.443 | a | | *Improve methods for educating handicapped children and develop systems of implementation. | *Handicapped children | | *Grants and/or contracts awarded directly. Some degree of cost-sharing is required.<br>**State or local educational agencies and public or nonprofit private institutions of higher learning and education or research organizations are eligible for grants. All of the above, plus profit making research agencies and organizations are eligible for contracts. | $ 15.0<br>(71)<br>$15.5<br>(72) |
| | | | | | | | |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATEI (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Handicapped Physical Education and Recreation Research Bureau of Education for the Handicapped, OE, HEW 1969<br>13.447 | a | | *Provide support for research and demonstration projects concerning physical education and recreation for handicapped children. | *Handicapped children | | *Grants of various amounts awarded directly. Some degree of cost sharing is required.<br>**States, state or local educational agencies, public and nonprofit private institutions of higher learning and other public or nonprofit private education or research agencies and organizations. | $300,000 (71)<br>$300,000 (72) |
| Developmentally Disabled-Hospital Improvement Program and Inservice Training Rehabilitation Services Administration, SRS, HEW<br>13.717 | b | | *Support for innovation projects designed to improve methods of care, treatment and rehabilitation through staff inservice training and service. | *Mentally retarded in state and residential institutions | | *Direct financial assistance with $100,000 per year maximum for innovation grants and $25,000 per year maximum for inservice training grants. Minimum 5% cost sharing required on innovation grants.<br>**State residential facilities for the mentally retarded | $ 8.972 (70) |
| Community Action Program CAP, OEO<br>49.002 | b | 2 | *Help local communities mobilize human and financial resources for combating poverty through CAA's --Assistance includes: nutritional, educational, medical, employment, rel. and child-care services | *Low income communities (unit with an organizational base and commonality of interested people-not necessarily a political unit) | | *Direct grants to CAA's for programs, amount depending upon number of local participants<br>**State or political subdivisions or public or private nonprofit agencies or organizations designated by same | $383.7 (71)<br>$342.1 (72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Training and Technical Assistance (CAP) Training and Technical Assistance Division<br>1967<br>49.002 (part of) | b | | *Orientation and training of all community action personnel. | *General population (that receive aid from CAA)<br>**Washington headquarters, 7 regional offices, 1,100 CAA. | | *Grant direct to program. Size depends on scope--mainly used to sustain existing programs.<br>**CAA and their delegated agencies. | some part of $383.7 (71)<br>$342.1 (72) |
| Guardianship Service for Veterans and their Dependents<br>Department of Veteran's Benefits<br>VA | a | | *Supervision of estate administration of VA benefits paid on behalf of individuals under legal disability because of minority or mental disability | *Those who should receive VA benefits | | *Applicant needs only knowledge and an interest in a VA beneficiary who is under legal disability<br>**VA | not applicable |
| Migrant and Seasonal Farm Workers Assistance<br>Chief of Migrant Branch CAP<br>OEO<br>1964 (amended)<br>49.009 | b | 3 | *Activities designed to meet immediate needs to improve family living conditions.<br>**Day care and health. | *Migrants with income below poverty level | | *80%-100% to state and local nonprofit agencies. Limited to education, housing and child development programs.<br>**State and local nonprofit agencies. | $ 35.1 (71)<br>$35.0 (72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Aid to Families with Dependent Children Assistance Payments Administration, SRS, HEW<br>13.703 Now under 13.761 Public Assistance--Maintenance Assistance (Financial aid to States) | b | 2,3 | *Financial assistance to encourage care of dependent children in their own homes or homes of relatives.<br>**Financial assistance for certain children in foster care under limited specified circumstances. | *Needy children (under 18 and 21 if in school) and their caretakers. Children lacking parental support because of death, continued absence or father's unemployment.<br>**5,348,000 received $39.50 per month. | | *State and local welfare agencies must operate under an approved HEW state plan. Federal government shares in maximum of $32/recipient/month. 5/6 of first $18, and 50-60% inverse ratio to per capita income. If it is to state's benefit may use Medicaid formula, which ranges from 50-83%. Federal share of home repair is 50% with a limit of $250.<br>**State and local welfare agencies. | $ 2.54 bil (71) Federal share was $1.4 bil<br>Federal all # 13.761<br>$5.57 bil (71)<br>$6.66 bil (72) |
| Aid to the Blind Assistance Payments Administration, SRS, HEW<br>13.704 now under 13.761 | a | | *Financial assistance to eligible persons to supplement own resources | *Needy blind person | | *Formula grants to state agencies based on state's average monthly payment up to $75. Federal government pays $31 of first $37, within the maximum and 50-65% of remaining $38. State may use Medicaid formula with no maximum (Federal pays 50-85%). Federal pays 50% of home repairs with limit of $500 Federal and non-Federal for any one house. Federal payments to intermediate care facilities may be either preceding formula or Medicaid formula.<br>**State and local welfare agencies. | $ 58.2 (71)<br>all # 13.761<br>$5.57 bil (71)<br>$6.66 bil (72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. APPROPRIATE (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Emergency Welfare Assistance Assistance Payments Administration, SRS, HEW 1969<br>13.709 (now under 13.761) | a | | *Help ameliorate emergency situations in target population before process of eligibility determination for AFDC | *Families with children under 21 in emergency situations<br>**34,700 (estimate 1970) | | *Federal grants to state each quarter based on state estimated needs. Federal government pays 50% of total payments and 50% of costs of administration of state and local welfare agencies. Federal assistance is limited to no more than 30 days in any 12 month period to any one family.<br>**State and local welfare agencies | $ 12.3 (71)<br>all # 13.761<br>$5.57 bil (71)<br>$6.66 bil (72) |
| Social Security-Survivors Insurance SSA, HEW<br>13.805 | a | | *Monthly cash payments for survivors of qualified deceased workers | *Survivors of deceased workers | | *Payments directly to eligible survivors (deceased must have earned enough wage credits). Those eligible are: any widow 60 or older; a widow of any age if caring for child under 18 or disabled, the child gets payments; unmarried child under 18 (22 if in school); unmarried disabled child, 18 or over if disabled before 18; a widow or dependent widower 50 or older who becomes disabled not later than 7 years after death of the worker; dependent widower or parents 62 or older.<br>**Individuals and families. | $8.295 bil (71)<br>$9.061 bil (72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. APPROPRIATE (FY) (millions |
|---|---|---|---|---|---|---|---|
| Dependency and Indemnity Compensation for Service-Connected Death Department of Veteran's Benefits, VA<br>64.102 | a | | *Compensate target population for death of any veteran who died on or after 1/1/57 because of a service connected disability. | * Surviving widows, schoolchildren, parents<br>**351,554 (by 1970) | | *Payments directly to surviving unremarried widow, children and parents of veteran who died on or after 1/1/57 because of service connected disabilities. Payments to parent only if income is less than $2,300 annually or if living with spouse or remarried, combined annual income is less than $3,500.<br>**Individuals and families | $523.0 (71)<br>$583.5 (72) |
| Pensions to widows and children Compensation, Pension and Education Service, Department of Veteran's Benefits, VA<br>64.105 | a | | *Assist target population with monthly payments | *Widows and children of wartime vets, who died of non-service-connected disabilities | | *Payments directly to unremarried widows and children of deceased veterans with at least 90 days honorable active wartime service or, if less than 90 days, with discharge for service connected disability. Income must be less than $2,300 annually for unremarried widow without child, or $3500 for unremarried widow with child. Child must be unmarried and 18 or under (22 if in school) or unmarried 18 or over if disabled before 18 and continue to be disabled with unearned income limited to $2,000 annually. Pension is not payable to those whose estates are so large that it is reasonable that they look to the estate for maintenance.<br>**Individuals. | $963.7 (71)<br>$1,058 (72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATE (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Educational Personnel Training Grants-Career Opportunities Bureau of Educational Development, OE, HEW 1965 (amended)<br>13.421 | 1,2 | b | *To attract persons from low-income backgrounds and returning veterans into careers in schools serving poverty areas | *low income families<br>**Hasn't started yet. | | *Direct to local school districts recognized as such by their states. Must be coordinated with Part B of EDPA<br>**Schools | $ 27.0<br>(71)<br>$ 23.8<br>(72) |
| New Career Opportunities for the Handicapped RSA, SRS, HEW 1971<br>13.749<br>Now under 13.763 Rehabilitation Services and Facilities-Special Projects | | b | *Provides support for special programs to recruit the handicapped for public service employment | *Handicapped | | *Direct to agency, which if not State, must be approved by State rehabilitation agency and SRS<br>**State vocational rehabilitation and public or private nonprofit organizations. | $<br>(71)<br>All #<br>13.763<br>$536<br>(71)<br>$621<br>(72) |
| | | | | | | | |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATE (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Vocational Education-Basic Grants to States Bureau of Adult Vocational and Library Programs OE, HEW 1968<br>13.493 | | b | *Assist States in providing vocational education programs for persons of all ages in all communities | *General population (who desire vocational education)<br>**6,150,000 youths and adults enrolled 81,000 training stations<br>met 40.8% of increase in nonprofessional employment | | *Formula grants to States based on population by age groups and per capita income. State plan approved by commissioner, local plans approved by State board for vocational education. May pay up to 50%, except for Pacific Islands, which receive 100%. States must allocate minimums of 15% vocational education for disadvantaged, 15% post-secondary programs, 10% programs for handicapped.<br>**Educational agencies, state and local. | $321.7 (71)<br>$383.8 (72) |
| Work Incentive Program (WIN) Training and Allowances Manpower Administration, Dept. of Labor<br>17.226 | 2,3 | b | *To refer AFDC recipients to work-experience and training projects<br>**Day care service for children of trainees (HEW support) | *AFDC recipients | | *State and local manpower agencies deliver manpower services. Manpower administration responsible for providing training and work experience. Welfare agency determines eligible persons and orderly referal of them.<br>**State and local manpower agencies, public and nonprofit organizations | $ 70.64 (71)<br>$185.14 (72) |

COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. APPROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Job Corps<br>Department of Assistance Director Recruitment, Screening and Placement Division, D.O.L.<br>1967<br>17.211 | b | 2 | *To serve youth who have fewest educational and vocational skills--to help them acquire and hold jobs enter armed forces, and generally pursue a more productive life. | *Youth 14-21 who require most intensive remediation | | *Makes no grants per se. Number of contractual agreements between Job Corps and industries and agencies or Job Corps centers, Job Corps solicits proposals and selects best bids.<br>**Federal, State and local governments, private enterprises, trade unions, universities | $160.2<br>(71)<br>$200.1<br>(72) |
| Neighborhood Youth Corps, In-School Program<br>U.S. Training and Employment Service I<br>1964 (amended)<br>17.222 | b | 2 | *To provide part-time work experience and training for students of high school age from low-income families to help them continue or resume their education.<br>**Day care | *Students of high school age from low income families | | *For wages, supportive services for enrollees and administrative costs<br>*CAA's preferred | All NYC Program<br>$426.5<br>(71)<br>$471.4<br>(72) |
| Neighborhood Youth Corps Out of School Program. U.S. Training and Employment Service<br>1964 (amended)<br>17.222 | b | 2 | *To provide work experience and supportive services to unemployed youth necessary to find and keep meaningful employment. | *Out of school individuals, poverty criteria, priority to youths | | *For wages, supportive services for enrollees and administrative costs<br>*CAA's preferred | All NYC Program<br>$426.5<br>(71)<br>$471.4<br>(72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS |
|---|---|---|---|---|---|---|
| Manpower Experimental and Demonstration Program Ass. Manpower Administrator Dept. of Labor 1968<br>17.217 | b | | *Develop methods, through actual project operations, for meeting manpower employment and training needs to equip works with enjoyable skills and job placement<br>**Day care | *Disadvantaged workers | | *Grants or contract funding (no loan: direct to body that has demonstrated financial responsibility and competence. |
| Manpower Development and Training Act-Institutional Training U.S. Dept. of Labor, OE, HEW 1968<br>17.215 | b | | *To provide training and/or retraining for unemployed and underemployed persons who need assistance to obtain or retain full-time employment. | *Unemployed, heads of households or member of family in which head of household is unemployed. Special youth (17- 21) allowances. | | *To eligible individual for training, subsistence and transportation.<br>**Educational agencies |
| Manpower Development and Training Div. of Manp. Development and Training OE, HEW 1969 (orig- | b | | *Provide occupational training, basic education, counseling and supportive services for unemployed and underemployed persons who cannot secure full-time employment with training | *Unemployed and underemployed persons<br>**Since 1962 30,600 received on-the-job training. | | *Training facilities which meet State requirements are reimbursed for costs of providing training and trainees receive allowance payments.<br>**Public or private educational agencies, supportive services. |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. APPROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Public Service Careers U.S. Training and Employment Service, U.S Dept. of Labor<br>1964 (amended)<br>17.224 | b | | *To train unemployed adults in subprofessional careers of service to the community | *Adults (22 or over) unemployed or meeting poverty criteria<br>**112 programs 11,200 people | | *Wages, supportive services for enrollees, administrative costs (for up to 2 years per individual)<br>**Community agencies, CAA. | $ 91.64 (71)<br>$62.20 (72) |
| Vocational Educational Innovation Bureau of Adult, Vocational and Library Programs, OE, HEW<br>Initiated 1970<br>13.502 | b | 2 | *Assist in development, establishment and operation of programs designed to stimulate new ways to create a bridge school and earning a living for young people<br>**Promote cooperation between public education and manpower agencies. | *Young people--dropouts, graduates or those in post-secondary programs of vocational education | | *State plans approved by Commissioner of Education. Each state gets minimum of $200,000 plus an amount in proportion to population aged 15 to 19 in the State as bears to total population in all States. Commissioner authorized to use 60% for making grants or contracts, and state boards the remaining<br>**State boards, local educational agencies, public or private agencies | $ 13.8 (71)<br>$21.0 (72) |
| | | | | | | | |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Concentrated Employment Program (CEP)<br>U.S. Training and Employment Service Manpower Asst.<br>U.S. Dept. of Labor<br>17.204 | b | | *Assist jobless persons in attaining skills and jobs, mainly in private sector. To combine all services available to Dept. of Labor with one Sponsor<br>**Basic education, health services and day care | *Disadvantaged residents of designated target areas<br>**67 cities<br>13 rural areas | | *Local sponsor responsible to Federal agency. Funds may be expended for any reasonable purpose.<br>**Usually CAA's | $166.8<br>(71)<br>$154.6<br>(72) |
| On-the-Job Training Programs (OJT)<br>Manpower Develop. & Training Division<br>U.S. Dept. of Labor<br>1962 (amended)<br>17.228 | b | | *To develop and secure adoption of programs to equip enemployed and underemployed persons with skills to keep up with changing technology.<br>**Training in day care occupations | *Persons, including youth, in need of skill training and retraining, and/or disadvantaged | | *Contracts for reimbursal of instructors, administrative costs, supplementary education.<br>**Employers, labor organizations, trade associations, and public and private agencies | $ 20.18<br>(71)<br>$20.50<br>(72) |
| | | | | | | | |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. APPROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Special Impact Program OEO, EOA 1964 (amended)<br>49.011 | b | | *Develop and operate projects aiming to solve critical problems facing urban areas with large numbers of low income persons. | *Low income persons at least 16, below poverty line or unemployed | | *Federal contribution up to 90% Sponsors share in cash or in kind<br>*CAA's receive preference. Otherwise, any organization except a political party eligible | $ 34.83 (71)<br>$ 25.0 (72) |
| Vocational Educational Research Ass. Commissioner for Research, OE, HEW 1968<br>13.498 Now included 13.517 Vocation Education Research-Special Project | b | | *For grants and contracts for research in vocational education, demonstration and dissemination projects and development of new curricula | **500 grants and contracts. 50 state coordinating units since 1966. | | *50% of funds alloted to each state go to programs approved by Commissioner. Other 50% goes to programs approved by state board, of which 75-90% of cost for such programs may be from Federal funds<br>**State and local agencies, public and private agencies | $ 35.7 (71)<br>$18.0 (72) |
| Food and Drug-Consumer Education PHS, CPEHS, HEW | b | | *Seeks to help consumer buy foods wisely; protect children against poisonings in home; to get most benefit from consumer protection laws | *Consumers<br>**20 consumer specialists, workshops in 17 cities | | *Consumer education service available to all communities with no requirements for eligibility<br>**Specialists from FDA | $300 thousand |
| | | | | | | | |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Vocational Education-Consumer and Homemaking Bureau of Adult Vocational and Library Programs, OE and HEW 1968<br>13.494 | b | 2,3 | *Assists States in conducting programs in consumer and homemaking education to increase employability of homemaker-wage earner and to improve family living, nutrition, child care and guidance. | *Consumers, especially homemakers | | *States with approved plans given grants based on population by age groups and per capita income. May be used to help to pay up to 50% of costs incurred by vocational educational programs and services. 1/3 of Federal funds must be used in economically depressed area.<br>**Educational agencies, state and local | $ 21.2<br>(71)<br>$25.6<br>(72) |
| Extension Programs for Improved Nutrition Federal Extension Service USDA<br>10.503<br>Now under CES | b | 2 | *Provide nutrition education to maintain highest dietary levels by influencing families to establish good habits and encourage rural families to have gardens | *Consumers, especially rural families and those who receive food stamps. | | *Plans by local committee and advisory group working with county extension officers, are brought together by State extension director and submitted to Federal Extension Service.<br>**Anyone. | Total CES<br>$138.6<br>(71)<br>$149.3<br>(72) |
| Community Relations Field Service, CRS Dept. of Justice 1964<br>16.200 | b | | *Determine needs of Black and Brown impoverished neighborhoods primarily located in urban areas. | *Blacks and Browns | | | $ 4.609<br>(71)<br>$ 5.807<br>(72) |

B Y AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Model Cities Program<br>HUD<br>1966<br>14.300 | b | 2 | *Improve environment and general welfare of people in slums and blighted urban areas with comprehensive efforts in economic, physical and social areas in 5 year programs. | *Slum and blighted urban areas | | *Planning grants covering up to 80% Supplementary grants, up to 80% of non Federal local share of all Federal grant programs or effecting the model cities area, supplementary grants up to 80% of local administration costs.<br>*General purpose unit of local government | $503.2<br>(71)<br>$617.5<br>(72) |
| Neighborhood Facilities Grant Renewal and Housing Assistance<br>HUD<br>1965<br>14.302 | b | 2 | *Provide multipurpose neighborhood centers that offer programs of health, recreation, social and similar community services | *Neighborhoods, primarily of low income families | | *66 2/3% of development cost, or 75% of cost in areas designated for redevelopment under Section 410, Public Works and Economic Development Act of 1965<br>**Local government agencies, or non-profit organizations controlled by local government agencies, with priority to CAA's. | $ 40.0<br>(71)<br>$40.0<br>(72) |
| Volunteers in Service to America<br>VISTA-ACTION<br>1964<br>72.003<br>(formerly 49.012 | b | 2 | *Provides volunteers to live and work with the poor and help them find leadership from within the community. | *The poor in urban slums, rural poverty areas, Indian reservations, migrant camps | | *No grants--provides manpower. Volunteers serve under sponsor<br>**Private or public agency or group, CAA's, OEO etc. | $ 36.4<br>(71)<br>$37.0<br>(72) |
| | | | | | | | |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Agriculture Extension for Indians BIA, Dept. of Interior<br>15.101 | b | | *Counsel Indians regarding farming, ranching, homemaking, youth development | *Indian individuals and groups | | *Contracts with State universities | $ 2.26 (71)<br>$2.28 (72) |
| Urban Planning for Human Resources Development--Information and Technical Assistance. Model Cities Technical Assistance. Center for Community Planning Office of the Secretary, HEW 1968<br>13.604 | b | 2 | *Delivery of information and technical assistance to cities and states as they plan and implement programs to improve living standards of city dwellers | *City dwellers | | *None. Technical assistance through DHEW Regional Directors. To operate the technical assistance program agency. Center coordinates HEW resources.<br>**HEW regional directors assist any organization interested in attacking problems of urban areas. | Total of 13.604<br>$985,000 (71)<br>$ 1.06 (72) |
| | | | | | | | |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Regional Technical Assistance to State and Community Agencies NIMH, PHS, HEW | b | 2 | *Administrative prog. to enable NIMH to best serve state and local agencies and individuals by serving as liaison and advisory group | *General population (mental health) | | *No grant funds<br>**Nine regional staffs provide consultation on programs of NIMH to public and private agencies and individual citizens | |
| Technical Assistance (To Support Redevelopment Activities)<br>EDA, Dept. of Commerce<br>1965<br>11.303 | b | | *Technical assistance to help eligible areas evaluate their needs and develop their potential for economic growth | *Underemployed and unemployed | | *Technical assistance and grants for problem-solving projects to prevent unemployment and underemployment. Agreement to repay costs of technical assistance may be sought in certain cases.<br>**State agencies, nonprofit and profit and local development groups, corporations, individuals, EDA, and Dept. of Commerce, other groups. | $ 12.40 (71)<br>$12.26 (72) |
| Juvenile Delinquency Prevention and Control-Training<br>SRS-HEW<br>1969<br>13.713 (DELETED-no FY 73 Fund) | b | 2,3 | *Provide assistance for projects for training of personnel employed in fields related to diagnosis, treatment or rehabilitation of actual or potential delinquents<br>**Day care for mothers and employment of non-professionals in day care | *Actual or potential juvenile delinquents | | *Grants or contract funds for curriculum development, short-term institutes, and traineeships<br>**Federal, State, local public or private nonprofit agencies | $ 2-3 (71)<br>$ 1.7 (72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Juvenile Delinquency Planning, Prevention and Rehabilitation SRS-HEW 1968<br>13.711 (DELETED-No FY 73 Fund) | b | 2 | *Assist States and localities to prepare diagnosis, treatment, rehabilitation and preventive services for actual or potential juvenile delinquents<br>**Day care for mothers and employment of nonprofessionals in day care | *Actual or potential juvenile delinquents | | *Comprehensive planning grants: State or local public agency designated by chief executive of applicant jurisdiction.<br>Project planning grants: State, county, municipal or other public or nonprofit private agency<br>Prevention: State or local public or nonprofit agency<br>Rehabilitation: Public agencies Includes construction<br>**States and localities. | $ 10.0 (71)<br>$ 7.3 (72) |
| Juvenile Delinquency Prevention and Control Model Programs Technical Assistance SRS-HEW 1968<br>13.712 (DELETED-No FY 73 Fund) | b | 2 | *Provide assistance for projects in improved techniques and practices in juvenile delinquency control and support in technical matters<br>**Day care | *Actual or potential juvenile delinquents | | *Support for projects by public agencies (state or local). Technical assistance to public agencies and private nonprofit agencies (Grant support only for local units). Contracts with individual and public and private agencies.<br>**State, local, or privage agencies. Private nonprofit agencies. | $ 2-3 (71)<br>$ 1.0 (72) |
| Work-Study Programs OE, HEW 1968<br>13.463 | c | 3 | *Provide needy students with jobs to help them obtain a higher education | *Needy students, particularly from low-income families<br>**375,000 students in 2400 colleges (71) | | *Grants made to institutions, may pay up to 80% of amount earned by student. May use a portion of grant to meet administrative purposes<br>**Institutions of higher learning | $199.7 (71)<br>$237.4 (72) |

BEST COPY AVAILABLE

| PROGRAM TITLE<br>FED. AGENCY<br>YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATE (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Student Aid-Educational Opportunity Grants<br>Bureau of Higher Education<br>OE, HEW<br>1968<br>13.418 | a | | *To make higher education possible for undergraduate students of exceptional financial need | *Undergraduate students of exceptional financial need<br>**396,500 students in 3 years<br>1,900 institutions | | *Funds awarded to institutions, who may use an amount equal to 3% of their total administrative costs for administration. Individuals apply to institution, and may only use funds expenses of attending the institution | $164.6<br>(71)<br>$177.7<br>(72) |
| Neighborhood Youth Corps, Summer Program<br>U.S. TES<br>U.S. DL<br>1964<br>(amended)<br>17.222 | b | 2 | *To provide summer employment to high school age students who meet poverty criteria | *High school age students from low income families (poverty criteria) | | *Wages, supportive services for enrollees and administrative costs<br>**CAA's preferred | All NYC Programs<br>$426.5<br>(71)<br>$471.4<br>(72) |
| Farm Labor Housing Grants<br>FHA, USDA<br>1949<br>(amended)<br>10.405 | b | | *Provides grants towards construction of rental housing for domestic farm laborers | *Domestic farm laborers<br>**See 6.14 FLH Loans | | *Projects approved by FHA. Grants not exceeding 50% of cost<br>*States or political subdivisions; broadly based community nonprofit organizations | $736,550<br>(71)<br>$3,767,00<br>(72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Rural Rental and Cooperative Housing Loans<br>FHA, USDA<br>1949 (amended)<br>10.415 | b | | *To provide loan financing for construction of rental and cooperative housing for rural families and senior citizens.<br>**Recreation and service facilities | *Rural families of low or moderate incomes. Also senior citizens in rural areas.<br>**20 direct loans<br>490 insured loans<br>3,000 families | | *Grants go to projects formed by individuals and corporations and approved by FHA<br>**Individuals, business corporations, nonprofit corporations, and cooperatives | $ 26.8<br>(71)<br>$35.0<br>(72) |
| Farm Labor Housing Loans<br>FHA, USDA<br>1949 (amended)<br>10.405 | b | | *Provides loan financing for construction of rental housing for domestic farm laborers<br>**Health and recreation facility construction | *Domestic farm laborers<br>**Since beginning of program 4,146 families and 3,307 individuals. This includes 6.10 | | *Applicant individual or organization cannot finance needed improvements with own resources or credit from other sources<br>**FHA | $474,300<br>(71)<br>$ 10<br>(72) |
| HUD Guaranteed Individual Loans to Low Income Farm and Rural Families<br>FHA, USDA<br>1968 | b | | *Provide loan financing so low income and rural families may have adequate housing | *Low income farm and rural families | | *Interest supplements by HUD reduce interest costs to as low as 1% when mortgage payment exceeds 20% of family income<br>**FHA | $ 69.0<br>(69) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Rural Housing Site Loans<br>FHA, DA<br>1949<br>(amended)<br>10.411 | b | | *To assist public or private nonprofit "organization interested in providing sites for housing, acquire and develop land in rural areas to be sold on a nonprofit basis to eligible low and moderate income families | *Rural families, of low and moderate income<br>**3 loans 70<br>3 loans 71<br>for 240 sites | | *Direct to organization. Loan may not exceed $100,000. May not be used for operating costs, refinancing of debts, commissions<br>**Nonprofit organizations | $ 1.61 face value of loans<br>(71)<br>$ 6.22<br>(72) |
| Interest Reduction Payments-Rental and Cooperative Housing for Lower Income Families<br>FHA, HUD<br>1968<br>14.103 | b | | *To provide good quality rental and cooperative housing for persons of low-and moderate-income by providing interest reduction payments in order to lower their housing costs. | *Low and moderate income families | | *Families and individuals eligible to the benefits of subsidies must fall within certain income limits as determined locally case by case. Unit mortgage limits--efficiency $9,200, 1 bedroom,$12,937, 2 bedrooms $15,-525, 3 bedrooms $19,550, four or more $22,137. May be increased up to 45% where cost levels so require. Interest paid by mortgager may be as low as 7%.<br>**Nonprofit cooperative, builder-seller, investor-sponsor and limited distribution sponsors. No public bodies. | $ 14.64<br>(71)<br>$ 84.00<br>(72) |
| Interest Subsidy-Acquisition and Rehabilitation of Homes for Resale to Lower Income Families<br>FHA, HUD<br>1968 14.104 | b | | *To make it possible for a non-profit organization or public body to finance the acquisition and the rehabilitation of housing that will be sold to lower income families | *Lower income families | | *Purchaser of rehabilitated units must have incomes within specified limits(as determined by a locality on a case by case basis). Maximum amount of loan is 100% of FHA estimated cost of rehabilitation, plus the lesser of the appraised of the appraised value of the properties, or the purchase price.<br>**Private nonprofit organization and public bodies approved by HUD. | $121.6<br>(71)<br>$251.0<br>(72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Major Home Improvement Loan Insurance-Homes in Urban Renewal Areas FHA, HUD<br>14.107 DELETED FY 73 | b | | *To help families repair or improve existing residential structures in Urban Renewal Areas. Insures lenders against losses on loans | *Urban renewal families | | *Maximum amount of loan equal to the difference between (a) the maximum amount of a mortgage loan, which is equal to 97% of first $15,000, 90% next $10,000-$25,000, 80% thereafter, and (b) the amount of current indebtedness on the property. Current maximum interest is 7%. Service charge may normally not exceed 1% of the total loan.<br>Maximum loans: $12,000/single family home can go up to $17,400 if cost levels require. Higher for two or more living units.<br>**Lenders | None (71)<br>None (72) |
| Major Home Improvement Loan Insurance-Rental Housing in Urban Renewal Areas FHA, HUD<br>14.109 DELETED? | b | | *To make possible the financing of improvements for rental housing in urban renewal areas. | *Urban renewal families<br>**5 projects thru 1970 | | *Loan limit is the lesser of $12,000/family unit or estimated cost of improvement. The loan plus the debt on the property may not exceed 90% of the estimated value before rehabilitation cost and the maximum interest rate is 7% plus 1/2% for mortgage insurance premium.<br>**Lenders | None (71)<br>None (72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATE (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Mortgage Insurance-Homes in Urban Renewal Areas<br>Housing Prod. & Mortgage Credit, FHA, HUD<br>1954<br>14.122 | b | | *Help families purchase or rehabilitate homes in urban renewal areas by insuring lenders against loss on mortgage loans | *Urban renewal families<br>**195 home mortgages insured FY 1970 | | *Loans to finance acquisition or rehabilitation of 1 to 11 family housing in urban renewal or code enforcement areas. Maximum loans are: one family, $33,000; 2 or 3 family, $35,750, 4 family, $41,250. For most families, maximum amount of loan is 97% of first $15,000 of estimated replacement cost, 90% of the next $10,000, up to $25,000, and 80% of amount over $25,000. Down payment is difference between maximum loan amount and purchase price of home, or estimated value, whichever is less. Purchaser pays items of prepaid expense. Current maximum interest rate is 7% plus 1/2% for mortgage insurance premium. FHA application fee is $40.00 for existing and $50.00 for proposed housing. Service charge by mortgagee varies, but may not exceed 1%<br>**Lenders | Total Mortgage Insured:<br>$1.947 (71)<br>$6.603 (72) |
| Mortgage Insurance-Housing in Older, Declining Areas<br>Housing Prod. & Mortgage Credit, FHA, HUD<br>1968<br>14.123 | b | | *Help families purchase or rehabilitate housing in older, declining urban areas by insuring lenders against loss on mortgage loans | *Families<br>**34,653 home mortgages insured FY 1970 | | *Mortgages may be insured under any one of several FHA programs, which determine loan amount, down payment, and other mortgage terms. Current maximum interest rate is 7% plus 1/2% for mortgage insurance premium.<br>**Lenders | Total Mortgage Insured:<br>$324.6 (71)<br>$301.8 (72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Mortgage Insurance-Rental Housing for Low and Moderate Income Families, Market Interest Rate<br>Housing Prod. & Mortgage Credit, FHA HUD<br>1954<br>14.137 | b | | *Provide good quality rental or cooperative housing within the price range of low-and moderate-income families by insuring lenders against loss on mortgage | *Families<br>**32,127 units covered by insured mortgage FY 1970 | | *Insured mortgages to finance con-construction or rehabilitation of rental or cooperative detached, semidatched, row, walk-up or elevator structures, or to finance purchase of properties which have been rehabilitated by a local public agency. Housing must have minimum of 5 units. Unit mortgage: Limits for nonelevator apartments ere: efficiency, $9,200; 1 bedroom $12,937 2 bedrooms, $15,525; 3 bedrooms, $19,550; 4 or more, $22,137. Limits higher for elevator-type structures. Where local costs levels require, limits per family unit may be increased up to 45%. Maximum amount is 100% (90% for limited distr. mortgagers) of the estimated re-replacement cost in most cases.<br>**Public, nonprofit, cooperative, builder-seller, investor-sponsor, and limited distribution mortgagors. | Total Mortgages Insured<br>Some part of $739.8 (71)<br>$881.8 (72) |
| Mortgage Insurancer Rental Housin Urban Renewal Areas<br>FHA, HUD<br>1954<br>14.139 | b | | *To provide good quality rental housing in urban renewal areas | *Urban renewal families<br>**11 project mortgages (70) | | *For most mortgagors maximum amount of the loan may not exceed 90% of the estimated replacement cost. The maximum interest rate permissible is 7% plus 1/2% for mortgage insurance premium<br>**Lenders | $ 57.77 (71)<br>$ 64.06 (72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Public Housing--Acquisition (with or without rehabilitation) and Construction FHA, HUD 1937 (amended)<br>14.146 | b | | *To provide decent, safe and sanitary low-rent housing and related facilities for families of low-income through authorized public agency ownership | *Low-income families | | *Annual contributions to housing authorities to meet debt service requirements and maintain rents at or below 25% tenant income. No matching requirements, but indirect local contribution by difference between full local property taxes and payments in lieu of taxes made by local housing authorities<br>**Local housing authorities, public or private agencies, or Indian tribal organizations. | $626.4 (71)<br>$886.0 (72) |
| Public Housing-Home Ownership for Low-Income Families FHA, HUD 1937 (amended)<br>14.147 | b | | *To provide, through local public housing agencies, low-income families with the opportunity of owning their own homes. | *Low income families | | *Annual contributions made to local public agencies for use as subsidies and to cover debt service. No matching requirements Family makes payments of 20-25% of their income.<br>**Local housing authorities, authorized public agencies, or Indian tribal organizations | Included in the amount for 14.146 above |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Public Housing-Leased<br>FHA, HUD<br>1937<br>amended 1952<br>14.148 | b | | *To assist local public agencies to provide decent safe and sanitary low-rent housing and related facilities for families of low income through the leasing of existing or newly constructed housing. | *Low-income families | | *Annual contributions make up the difference between the rent paid to the owner by the local public agency and the rent paid by the low-income family (not to exceed 25% of their income) but not in excess of the amounts that would be paid for newly constructed public housing units by such local public agency designed to accomodate comparable numbers, sizes and kinds of families. No matching requirements.<br>**Local housing authorities, authized public agencies or Indian tribal organizations | Included in the amount for 14.146 above |
| Rent Supplements-Rental Housing for Lower Income Families<br>Housing Prod & Mort. Credit, FHA, HUD<br>1965<br>14.149 | b | | *Make good quality rental housing available to low-income families at a cost they can afford by making payments to owners of approved multi-family housing rental projects to supplement partial rent paid by eligible tenants. | *Low-income families<br>**30,804 units under assistance, FY 1970 | | *Assistance covers the difference between tenant's payment and market rental but not exceeding 70% of market rental. Assisted tenants must pay at least 25% of their adjusted monthly income (after certain deductions) for rent. Individual eligibility ceases when adjusted income exceeds maximum allowable for receiving subsidy benefits.<br>**Nonprofit, cooperative, builder-seller, investor-sponsor, limited distributor, mortgagors. Public bodies not eligible. | $ 44.6 (71)<br>$85.0 (72) |

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Neighborhood Development<br>Community Development<br>HUD<br>1968<br>14.306 | b | | *Provide financial assistance for rehabilitation or redevelopment of slums and blighted areas through grants and loans | *Communities<br>**310 urban renewal areas funded FY 1970 | | *Funding on a 2/3 basis (pop. over 50,000) a 3/4 basis (pop. under 50,000) based on amount of grant and loan funds needed over 12 month period in each urban renewal area in community program. Funding on 3/4 basis in all areas designated as economic development areas by EDA. Applicant must provide at least 1/3 of 1/4 amount of loan and grant funds needed over a 12 month period.<br>**Local public agencies. | $376.4<br>(71)<br>$575.0<br>(72) |
| Urban Renewal Projects<br>Community Development<br>HUD<br>1949<br>14.307 | b | | *Provide financial assistance for rehabilitation or redevelopment of slums and blighted areas through grants and loans | *Communities<br>**108 new projects FY 1970 | | *Grant may cover 2/3 (pop.over 50,000) or 3/4 (pop. under 50,000) of cost of renewal activities. Applicant must provide at least 1/3 of 1/4 loans and grants funds needed<br>**Local public agencies. | Grants and Loans<br>$551.0<br>(71)<br>$835.0<br>(72) |
| Equal Opportunity in Housing<br>Office of Equal Opportunity<br>HUD<br>1968<br>14.400 | c | | *Assure fair housing throughout the U.S. by investigations, conciliation of complaints. | *General population<br>**972 complaints FY 1970 | | *Not applicable<br>**Individual may file a complaint with HUD and file a suit in federal or local courts seeking injunctive relief, actual damages and a maximum of $1,000 punitive damages plus court costs and fees. Litigation may be initiated by the Attorney General. | $ 8.60<br>(71)<br>$8.25<br>(72) |
| | | | | | | | |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Public Housing Modernization of Projects<br>Housing Management<br>HUD<br>14.607 | b | | *Provide loans and annual contributions to bring existing public housing projects up to standards and involve tenants in all aspects of management including modernization program, management policies and practices, services, facilities and employment opportunities. | *Low income families<br>**From inception to FY 1970 306,200 units | | *Loans limited to the amount that be amortized within the remaining years of the annual contributions contract. Formula based on annual contributions to meet the requirement for debt service.<br>**Local housing authorities operating federally assisted public housing projects under an existing annual contribution contract. | Loans<br>$ 15.1<br>(71)<br>$ 45.0<br>(72) |
| Indian-Community Development<br>Bureau of Indian Affairs, Dept. of Interior<br>1921<br>15.104 | b | | *Strengthen the community organization skills of Indian communities preparing them to assume control over present BIA-administered projects. Provides for training, research, projects, and staff | *Indian communities<br>**In FY 1970, 15 federal positions (GS-4 to GS-14) replaced under tribal service contracts. | | *Project grants direct to organization or tribe<br>**Federally recognized Indian tribes, Indian interest organizations, or individual members of recognized tribes. | $858,000<br>(71)<br>$900,000<br>(72) |

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Indian-Contracts with Indian School Boards Bureau of Indian Affairs, Dept. of Interior 1936<br>15.105 | b | | *Encourage Indian participation in local school affairs and provide for operation of schools by local Indian people | *Indian students and community. (Indian children of 1/4 or more degree Indian blood who reside on or near reservation areas under BIA jurisdiction.<br>**389 students served under contracts with Indian School Boards | | *Grants paid to school board in accordance with negotiated contract. Use of facilities.<br>**Tribal corporation of Indian school board established within legal framework of tribe or other unit. | $935,683 (71)<br>$1,986,000 (72) |
| Indian-General Assistance BIA, DI 1921<br>15.113 | b | | *To provide assistance for living needs to needy Indians on reservations and in jurisdictions under BIA in Alaska and Oklahoma, when such assistance is not available from state or local public agencies. | *Needy Indians<br>**64,000 per month | | *Assistance provided monthly or as needed<br>**Indian agency | $ 31.2 (71)<br>$37.8 (72) |
| Indian-Housing Development BIA, DI 1921<br>15.115 | B | | *To eliminate substandard Indian housing in the 1970's in accordance with the joint plans of HEW, HUD and this program. | *Indians and others who meet income standards set by local authority<br>**5,500 units completed; 2,100 under construction by 1970 | | *None<br>**HEW, HUD, local Indian agencies | $ 2.26 (71)<br>$2.43 (72) |

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. APPROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Indian-Housing Improvement<br>BIA, DI<br>1921<br>15.116 | b | | *To eliminate substandard Indian housing in the 1970's in conjunction with other Federal housing programs. | *Indians who do not have financial ability to provide their housing.<br>**3500 repaired 600 new homes constructed (70) | | *No matching requirements. Used in conjunction with other Federal or privately financed programs.<br>**BIA | $ 6.63 (71)<br>$ 9.16 (72) |
| Equal Opportunity CRD, Dept. of Justice<br>1964<br>16.101 | c | | *To provide equal opportunities for employment regardless or race, religion, national origin or sex | *General population (those discriminated against) | | *Not applicable<br>**Attorney General | Not separately identifiable<br>Total CRD<br>$ 5.416 (71)<br>$ 5.891 (72) |
| Fair Housing CRD, Dept. of Justice<br>1968<br>16.103 | c | | *To provide freedom from discrimination on the basis of race, color, religion, or national origin in connection with the sale, rental or financing of housing. | *General population (those discriminated against)<br>**41 suits, 18 consent degrees, 1970 | | *Not applicable<br>**Attorney General | Not separately identifiable<br>See 16.101 |
| Protection of Voting Rights CRD, Dept. of Justice<br>1965-70<br>16.104 | c | 2 | *To provide protection of an individual's right to vote in all elections without discrimination on the basis of race, religion or creed and against restrictions concerning literacy and other tests. | *Voting population | | *Not applicable<br>**Attorney General | Not separately identifiable<br>See 16.101 |

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Equal Employment Opportunity by Federal Contractors Workplace Standards Admin. Dept. of Labor 1967<br>17.301 | c | | *Provide equal employment opportunities in the performance of Federal contracts and subcontracts | *General population | | *Investigation of complaints by individuals employed by a government contractor or subcontractor or in Federally involved construction who feels he has been the subject of discrimination.<br>**Local EEO Offices | $ 1.74 (71)<br>$ 2.57 (72) |
| Minimum Wage and Hour Standaras Workplace Standards Admin., Dept. of Labor 1965<br>17.303 | c | | *Provide standards protecting wages of working persons by requiring a minimum hourly wage rate, overtime pay, and equal pay for men and women performing the same or substantially equal work. Additional standards apply to child labor. | *Workers<br>**437,730 employees found to be underpaid FY 1970 | | *Federal wage and hour standards apply to employers engaged in interstate or foreign commerce or production of goods for such commerce. Special standards for contractors for Federal construction projects and for providing goods or services to Federal agencies. Special standards also for learners, handicapped workers full-time students, student-workers, and apprentices. For those covered by regular standards, current minimum hourly wage is $1.60 with time and one half required for hours worked over 40 in a workweek.<br>**Local offices of Wage and Hour Division | $ 24.5 (71)<br>$ 24.6 (72) |
| | | | | | | | |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. APPROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Spanish Speaking Americans Assistance Cabinet Committee on Opportunities for Spanish Speaking People 1969<br>25.001 | c | | *Assure that Federal Programs reach Spanish-speaking people and seek out new programs to handle problems unique to them. | *Spanish speaking people<br>**3,000 Congressional inquiries; 10,000 requests for information and assistance; 800 personal applications FY 1970 | | *Provide services and counseling to Mexican American, Puerto Rican, Cuban American, Spanish American, and all other U.S. citizens of Hispanic origin and naturalized citizens of Central America and South America and other Hispanic nations living in the fifty states.<br>**Cabinet Committee on Opportunities for Spanish Speaking People | $605,000 (71)<br>$860,000 (72) |
| Clearinghouse Services and Civil Rights Complaints Commission on Civil Rights 1957<br>29.001 | c | | *To communicate civil rights information to the public with emphasis on how Federal programs and policies can be used to advance equal opportunities for minorities and to achieve desegregation and integration. To receive, investigate and refer complaints concerning denial of civil rights | *General population (minorities) | | *Not applicable<br>**Commission on Civil Rights | $3.397 (71)<br>$3.744 (72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Job Discrimination Investigation and Conciliation of Complaints<br>EEOC<br>1964<br>30.001 | c | | *Provide for enforcement of the Federal prohibition against discrimination in employment based on race, color, religion, sex or national origin | *Aggrieved parties Anyone knowing of discriminatory practices<br>**3,355 investigations, 623 conciliations | | *Not applicable<br>**EEOC | $ 8.836<br>(71)<br>$ 13.94<br>(72) |
| Job Discrimination-Special Project Grants<br>EEOC<br>1964<br>30.002 | c | | *To increase capability of state and local anti-discrimination agencies to combat employment discrimination on a broad front by seeking out employment practices which perpetuate the exclusion of minorities and women. | *Minorities and women<br>**9,271 jobs obtained as a result of contract or actions | | *Not applicable<br>**State and local anti-discrimination agencies | $1,050,000<br>(71)<br>$ 1.5<br>(72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Strengthening State Departments of Education Grants to States<br>OE, HEW<br>1965 amended<br>13.486 | | 1 | | *Students | | *State applies to OE; Apportionment as follows: 40% in equal amounts to each State and D.C.; 60% according to ratio of number of public schools in State compared to number in all States. State must give 10% to local educational agencies on the basis of need.<br>**State & local educational agencies. | $ 28.3<br>(71)<br>$ 31.4<br>(72) |
| Trainers of Teacher Trainers<br>OE, HEW<br>1965 amended<br>not yet operated<br>13.490 | | 1 | *Supports projects to increase competence of trainers of teacher trainers. | *Students | | *Proposals must be approved by OE. State education must be satisfied; local education projects will be coordinated with programs under part B of EDPA.<br>**State and local educational agencies and institutions of higher education. | $ 11.9<br>(71)<br>$ 10.4<br>(72) |
| Vocational Education - State Advisory Councils<br>OE, HEW<br>1970<br>13.500 | | | *Advise State board for vocational education on development and administration of State plans. Prepare and submit annual evaluation on vocational education programs. | *Students | | *Each State advisory Council (separate for state board) is to be paid an amount equal to 1% of State's allotment but not more than $150,000 nor less than $15,000.<br>**State advisory council. | $ 2.38<br>(71)<br>$ 2.69<br>(72) |
| | | | | | | | |

Y AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Vocational Education - Planning & Evaluation<br>OE, HEW<br>1970 | | 4 | *Initiate projects to develop guides to assist States in planning programs responsive to vocational education needs. | | | *Grants or contracts direct to agency for project approved by Commissioner of Education.<br>**Colleges, universities, State boards, local private and nonprofit agencies. | $ 1.0<br>(71) |
| Social Services Training - Project Grants in Public Assistance<br>SRS, HEW<br>1965<br>13.724 | | | *Train personnel employed or preparing for employment by State agency administering public assistance plans, so that employees can take educational leaves and pay for costs of agency inservice training programs. | *General population receiving public assistance.<br>**2,200 granted educational leaves; 20,000 staff got tuition for short-term courses; in-house training to 60,000 agency employees. | | *75% Federal participation in costs if States provide social services and for skilled professional medical personnel and their supporting staff, otherwise 50% Federal participation. Applicants must apply to State agency.<br>**State agencies administering public assistance plans. | $ 43.87<br>(71)<br>$ 45.76<br>(72) |
| Vocational Education - Curriculum Development<br>Div. of Voc. & Tech. Ed., Bureau of Adult, Voc. & Library Programs, OE, HEW<br>1968<br>13.496 | | | *Provides assistance in development of curriculums for new and changing occupations, and to coordinate improvements in, and dissemination of, existing curriculum materials. | *Teachers and students.<br>**(Begun in 1970) | | *Project grants or contracts. Funds awarded to states on a population based formula.<br>**Colleges, universities, state boards, public or nonprofit private agencies, institutions, and organizations, through State and local educational agencies. | $ 4.0<br>(71)<br>$ 4.0<br>(72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. APPROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Training in Educational Research Research Training Branch, Bur. of Research, OE, HEW<br>1965<br>13.424 | | | *Increase number of professionally trained educational research and development personnel and increase competencies of those already in the field through training of new personnel and improvement and development of research training programs and materials. | *Students and teachers.<br>**From inception in 1966 to 1969, 4,891 trainees. | | *Grants in the form of graduate training programs, senior post-doctoral fellowships, institutes, and special projects.<br>**Grants to colleges, universities, State and local educational agencies and systems, and other public and nonprofit organizations. Contracts to profit-making organizations. | $ 3.25<br>(71)<br>$ 3.5<br>(72) |
| Evaluations Under Cooperative Research Authority Program Planning & Evaluation, OE, HEW<br>1965 | | | *Solicits evaluation studies on impact and efficiency of programs administered by OE and analysis of process and product of education. | *(Students) | | *Contracts awarded on the basis of competitive proposals.<br>**Individuals, associations, nonprofit and profit-making organizations, colleges, and universities. | |
| Research & Development-Regional Research Regional Research Program, Bureau of Research, OE, HEW<br>1965<br>13.476 | | 1 | *Encourage broad participation in small project research and research development grants by improving flow of information and building resources for educational research and development. | *(Students)<br>**In FY 1969, 314 project research grants, 14 research development grants. | | *Awards administered through Office of Education Regional offices. Maximum of $10,000 for project research grants, and of $50,000 for research development grants (renewable for 3 years).<br>**Colleges and universities, State and local school systems, public and private organizations, and individuals eligible for project research grants. Consortiums of institutions eligible for research development grants. | $ 2.0<br>(71)<br>$ 2.0<br>(72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. APPROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Educational Research Dissemination - ERIC System<br>OE, HEW<br>1967<br>? | | | *Seeks to provide educational community with unavailable or hard-to-find significant research reports and other documents. | *Students<br>**17,341 documents (by 1968) | | *Proposals evaluated on merits. Profit-making organizations eligible for research support but not for grants.<br>**Local school systems, colleges, universities, organizations, individuals. | $ 5.0<br>(71) |
| Educational Research - Statistical Surveys<br>OE, HEW<br>1965<br>? | | | *Authorizes surveys in field of education and dissemination of information derived therefrom. | *Students<br>**100 reports (expected '71) | | *Grants or contracts on a cost-share basis.<br>**Colleges, universities, State departments of education, public or private organizations. | $ 3.5<br>(71) |
| Research and Pilot Projects Small Grants Program, NIMH<br>1949 amended<br>? | | | *Grants awarded to investigators in child and family mental health.<br>**Research in day care centers. | *Children and families. | | *For pilot projects (up to 1 year) there is a grant up to $5,000. Funds granted for each project depends upon personnel and complexity of project. May not be used for extraneous expenses.<br>**Universities, colleges, hospitals, other nonprofit organizations. | $ 1.5<br>(71) |
| General Research Support Grants NIH - HEW<br>1944 amended<br>13.337 | | | *Support new research, pilot projects and research collaboration. | *General health of population. | | *Application must be from institution which has received at least $100,000 from NIH or NIMH in the last 12 months. May not be used for indirect costs, construction, payments to Federal employees, consultant fees.<br>**Health professional schools, non-Federal hospitals, State, municipal and other nonprofit research organizations. | $ 43.4<br>(71)<br>$ 44.3<br>(72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FLD. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Medical Research in Veteran's Administration<br>VA Dept. of Medicine & Surgery<br>64.001 | | | *Improve diagnosis, treatment and care of VA patients through increased knowledge and understanding. | *Veterans. | | *No grants. Assistance through staffing Veteran's hospitals and clinics.<br>**VA facilities. | $ 62.2<br>(71)<br>$ 68.1<br>(72) |
| Specific Grants for Research CSRS-USDA<br>10.200 | | | *To utilize academic science competence to solve urgent problems in important agricultural enterprises, rural communities and rural areas of human need. | *Rural communities. | | *Grants given on competitive basis. No matching requirements, but cost sharing is generally practiced.<br>**State agricultural experiment stations, land-grant colleges, and other colleges and organizations. | $ 3.0<br>(71)<br>$ 12.5<br>(72) |
| Mental Health Scientific Communications and Public Information National Clearinghouse for Mental Health Information, NIMH, HSMHA, HEW<br>13.243 | | | *To coordinate information exchange in all media to serve professionals and the public. | *General population (mental health)<br>**100,000 blocks of computer data. | | *No grants. All for operation of programs.<br>**All agencies concerned with mental health and Office of Communications. | $ 5.1<br>(71)<br>$ 7.3<br>(72) |
| | | | | | | | |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Mental Retardation Information and Coordination President's Committee on Mental Retardation 1966 54.001 | | | *Advises and assists the President on all matters pertaining to mental retardation; evaluates effects of programs, informs public, helps coordinate Federal, state and local agencies and activities. | *General population (mental health) | | *No grants. | $612,300 (71)<br>$625,000 (72) |
| Manpower and Employment Statistics Bur. of Labor Stat. DL | | | *Measures, analyzes and disseminates statistics in the areas of manpower, employment, hours, earning, family relationships. | | | *Not applicable.<br>**8 regional offices and headquarters in D.C. | |
| Advancement of Women's Employment Opportunities and Status Women's Bur. WSA, DOL<br>17.305 | | | *Improve female participation in economic and community life through programs in training: education, vocational education.<br>**Expanding home-related services. | | | *Information, promotional, technical and advisory services as well as publications available.<br>**Women's Bureau. | $ 1.23 (71)<br>$ 1.42 (72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. APPROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Business Services<br>Business Services Division, GSA<br>1949<br>39.001 | | | *Promote interest and participation of business concerns in Government contracts and purchasing through information and counseling. | *Businesses.<br>**135,270 FY 1970. | | *Funds to regional business service centers to provide services.<br>**Any interested businessmen, | $ 1.1 (71)<br>$ 1.1 (72) |
| Dental Research Fellowships<br>National Institute of Dental Research, NIH, HEW<br>13.324 | | | *Provide fellowships to , support graduate training of dental investigators in nearly all of the biological sciences. | *General population. | | *Predoctoral fellowship - stipends $2400, $2600, and $2800 in successive years, plus expenses to $2500 and $500 dependent's allowance.<br>Postdoctoral fellowships - stipends $6000, $6500, and $7000 according to experience, plus expenses if requested and $500 per dependent.<br>Special fellowships - stipends determined individually.<br>Research Career Development Awards (RCDA) - salary, up to $25,000, yearly for 5 years. Renewable for 3 more years, but not beyond recipients 45th birthday.<br>Fellowships may not support training towards a D.D.S., M.D. or other such degree.<br>**Outstanding citizens or non-citizens nationals of the US or other lawfully admitted US residents. Applicants for predoctoral fellowships must have a bachelors degree; postdoc. fellowships doctoral degree; special fellow. - be an experienced researcher or require specialized training, RCDA at least 3 yrs. of post-doc. exp. and be under 40 yrs. old. | $ 1.4 (71)<br>$ 1.6 (72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Dental Research - Collaborative Research and Development Contracts<br>Nat. Inst. of Dental Research, NIH, HEW<br>1944<br>? | | | *Support research on dental problems. | *General population. | | *Contracts awarded directly to qualified applicants, on competitive basis if possible.<br>**Individuals and organizations with necessary scientific resources. | $300,000 (71) |
| Construction for Educational Research<br>OE, HEW<br>1965<br>? | | | *Provide funds for constructing, remodeling, and equipping needed physical facilities for educational research and related purposes. | *Students. | | *Grants awarded directly. Cost-sharing is encouraged but not required.<br>**Universities, colleges, or other appropriate public or non-profit private agencies or institutions. | $ 12.4 (67) (Act authorizes $100 mill over 5 yrs from '66-'70) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. APPROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Construction of Nonresidential or Nonfarm Structures Fed. Housing Admin.,HUD<br>14.144 now under 14.142 | | | *To facilitate financing for construction of proposed non-residential structures - insures lenders against losses on loans. | *Lenders (general population)<br>**3,759 loans FY 1969 | | *Lenders insured against losses on up to 90% of any single loan, with max. insurance coverage limited to a total of 10% of total amount insured. Max. loan of $5,000 to mature in 7 yrs. 32 days (may be refinanced to no more than 12 yrs. from orig. loan date). Finance charges of 8.83% to 10.57% annually, depending on amount of loan and terms. Insurance charge (included in financing) is 50 cents per $100 per year of amount advanced.<br>**Owner of property to be improved or a lessee having a lease extending at least 6 months beyond maturity of loan. | some part of:<br>$570.4 (71)<br>$902.0 (72) |
| Construction of Nonresidential Farm Structures Housing Prod and Mortgage Credit, FHA, HUD<br>14.143 now under 14.142 | | | *Facilitate financing for construction of proposed nonresidential farm structures by insuring lenders against losses on loans. | *Lenders (general population)<br>**6,683 loans FY 1969. | | *Lenders insured against losses on up to 90% of any single loan, with max. insurance coverage limited to a total of 10% of total amount insured. Max. loan of $5,000 to mature in 7 yrs. 32 days (may be refinanced to no more than 12 yrs. from orig. loan date). Finance charges of 8.83% to 10.57% annually, depending on amount of loan and terms. Finance charges are 5.86% to 6.25% if term exceeds 7 yrs. 32 days. Insurance charge (included in financing) is 50 cents per $100 per year of amount advanced.<br>**Owner of property to be improved or a lessee having a lease extending at least 6 months beyond maturity of loan. | some part of:<br>$570.4 (71)<br>$902.0 (72) |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Property Improvement Loan Insurance - All Structures Housing Production and Mortgage Credit, FHA, HUD<br>14.142 | | | *Facilitate financing of improvements to homes and other existing structures by insuring lenders against losses on loans. | *Lenders (general population)<br>**382,577 loans FY 1969. | | *Lenders insured against losses on up to 90% of any single loan, with max. insurance coverage limited to a total of 10% of total amount insured. Max. loan of $5,000 to mature in 7 yrs. 32 days (may be refinanced to no more than 12 yrs. from orig. loan date). Finance charges of 8.83% to 10.57% annually, depending on amount of loan and terms. Insurance charge (included in financing) is 50 cents per $100 per year of amount advanced. If advance, exclusive of finance charges, exceeds $600 and is for improvement on residential structure, structure must have been completed and occupied for 90 days, unless loan is for construction of civil defense shelter or for repair of structure damaged in a major disaster.<br>**Owner of property to be improved or a lessee having a lease extending at least 6 months beyond maturity of loan. | $570.4 (71)<br>$902.0 (72) |
| Renewal Assistance Admin. (RAA) Nonresidential Rehabilitation Loans Office of Business Loans, SBA 1967 | | 4 | *Loans to rehabilitate an entire nonresidential property or nonresidential portion of a property to comply with code requirements and objectives of urban renewal plan. | *General population. | | *Loans may cover only rehabilitation cost (actual cost of construction repair work necessary, including architect's fees and permits) and fees and charges related to the loan. An RAA loan may not be used to refinance an existing debt, although it may be used to increase an existing RAA loan. Considering outstanding liens, loan may not exceed the lesser of : (a) rehabilitation cost (b) $50,000 (c) 80% of property value after rehabilitation.<br>**Owners and/or tenants. | From inception to May '69 loans totalling $1,900,000 |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Minority Business Enterprise OMBE, Dept. of Commerce<br>1969<br>[illegible].800 | | | *Assist the establishment and expansion of minority enterprises through mobilization of a full range of resources including those of the government and the business community. | *Minority businessmen.<br>**33 local community organizations as OMBE affiliates. | | *Services provided through OMBE.<br>**Any minority businessmen. | $ 2.1 (71)<br>$ 43.6 (72) |
| Surplus Property Utilization Office of Surplus Property Utilization, HEW<br>13.606 | | | *To make available and distribute Federal Surplus personal property to eligible health and educational donees. | *General population | | *Personal property - distributed through State agency for surplus property to eligible institutions. Donees pay a service charge to cover costs. Real property - sold at fair market price with a discount, plus external admin. costs. Discount ranges from 50% to 100%, depending on type of facility and proposed use.<br>**Personal property - tax-supported or private nonprofit tax-exempt medical inst., hospitals, clinics, health centers, schools, school systems, colleges and universities, schools for the mentally retarded and physical handicapped, licensed educ. radio and television stations, public libraries, and civil defense organizations. Real property - States and their political subdiv. tax-supported or nonprofit tax-exempt educ. and medical inst. | ($1.4 FY1971 for program admin.)<br>Value of Property<br>$459.3 (71)<br>$452.0 (72) |
| | | | | | | | |

BEST COPY AVAILABLE

| PROGRAM TITLE FED. AGENCY YR. ENACTED | BASIS OF PROG. | OUR REF. | *PRIMARY AND **SECONDARY FUNCTIONS | TARGET POPULATION *GROUP and **# SERVED | % OF ELIG. POP. | *FINANCIAL REQUIREMENTS & **SPONSORS | AMT. AP-PROPRIATED (FY) (millions) |
|---|---|---|---|---|---|---|---|
| Public Works and Economic Development Facilities Office of Public Works [illegible], Dept. of Commerce<br>11.300 | | | *Provide Federal financial assistance for public works and economic develop. facilities. | *General population. | | *Grants may be made up to 50% of cost of project cost. Severely depressed areas that cannot match Federal funds may receive supplementary grants that cover up to 80% of cost of project. Long-term, low interest loans are also available when financial assistance is not available from private sources or Federal funds.<br>**States, local subdivisions thereof, Indian tribes, and public and private nonprofit organizations or associations representing all or part of a redevelopment area. | Grants & Loans:<br>$170.8 (71)<br>$158.8 (72) |
| Child Welfare Research & Demonstration Grants, OCD, OS, HEW<br>13.608 | | | *Provides financial support for research and demonstration projects relating to early childhood intervention programs, youth studies, school age parents, and preparation for establishing stable family life. | *Children, families | | *Project grants and contracts<br>**Grants; public or other nonprofit institutions of higher learning, public or other nonprofit agencies or organizations engaged in research or child welfare activities.<br>Contracts; public or private organizations | $5.5 (71)<br>$11.5 (72) |

BEST COPY AVAILABLE

## Appendix III C

### Federal Programs Affecting Children -- An Attempt at Useful and General Analysis and Description

During the course of the study, we wanted to get a relatively concrete and detailed picture of present federal resources being directed towards the needs of children. The list of programs given in Appendix III B was compiled. An attempt was made to categorize each program according to purpose, type of service, funding, etc., and then to run computer tabulations and cross-tabulations to try to get a picture of the distributions of emphases among the programs.

In Chapters 1 and 2 of this report, we developed the idea of public purposes underlying the evolution of federal and other programs for children. Involved in the development of this idea was an attempt to classify the federal programs we had identified according to the public purposes they served. The table in the preceding appendix is arranged according to this scheme. Although this was useful in understanding the origin of the programs, it did not help us to identify areas of child needs that were and were not being served, or the various ways services reached children.

This appendix describes the cross-tabulation effort. It should be extended, but certain information will need to be added to make it useful. The problems which we encountered did not seem to be intrinsic to the approach but rather to arise from the data base from which we worked. There were three major deficiencies in our information:

1. We were unable to give the number of potential and actual beneficiaries of each program. An estimation of the relative scope and effectiveness of programs is dependent upon such information.

2. Many of our programs in fact represented only small parts of larger programs if only their child-affecting component was examined. We were, however, unable to parcel total appropriations among the various parts. Resource commitment to children could not be established.

3. Connected to this inability to break out resources allocated to children, there was a parallel inability to break out services delivered to children. Many programs are listed in existing federal catalogues as authorized to deliver various services to children -- e.g., day care -- that in fact they may or may not deliver. On the other hand, programs without an ostensible target in childhood may have an important influence upon children -- e.g., housing loan programs.

In light of these problems, it became debatable whether any conclusions or discussion based on the findings of the tabulations merited inclusion in the report. All in all, it seemed most reasonable to present a discussion of our effort here, and to press for similar research based on a more complete data base. Only in this way will it be possible to most effectively understand and work with federal programs for children.

The first step in our analysis was to develop a list of different characteristics which might or might not be found in a given program. These fell into twelve groups, which essentially represented ways of looking at programs. The groups of characteristics were

1. Source of funds
2. Managing/judging level--the level of government which had final say over disbursement
3. Sponsors--who could receive the Federal funds
4. Disciplines or professions involved
5. Target--in terms of age, family, or social group
6. Nature of program--initiative or supportive
7. Official goals--as interpreted from the Catalog of Federal Domestic Assistance
8. Route to children--direct or indirect
9. Target group intentions or restrictions, other than (5)
10. Program content and/or objectives
11. Aspects of child experience affected
12. Miscellaneous.

Available descriptions of each program were then compared with this list, and appropriate codes transferred to punch cards. As a very preliminary attempt was involved, little cross-checking was done. The items, and their incidence in the whole list, were as follows:

| ITEM | DESCRIPTION | | |
|---|---|---|---|
| | Source of funds | n | % |
| 01 | OEO | 8 | 3.6 |
| 02 | NIH or NIMH | 10 | 4.5 |
| 03 | OCD, HEW | 3 | 1.4 |
| 04 | HUD | 19 | 8.6 |
| 05 | DOL | 14 | 6.3 |
| 06 | BIA, Interior | 12 | 5.4 |
| 07 | USDA | 18 | 8.1 |
| 08 | OE, HEW | 54 | 24.3 |
| 09 | SRS, HEW | 27 | 12.2 |
| 10 | VA | 6 | 2.7 |

| | | n | % |
|---|---|---|---|
| 11 | SSA, HEW | 2 | .9 |
| 12 | HSMHA, HEW | 22 | 10.0 |
| 13 | Justice | 6 | 2.7 |
| 14 | PHS | 2 | .9 |
| 15 | FDA, HEW | 1 | .5 |
| 16 | other | 14 | 6.3 |

Managing/judging level--final decision as to allocation

| | | | |
|---|---|---|---|
| 17 | source | 188 | 85.0 |
| 18 | regional federal agency | 10 | 4.5 |
| 19 | state agency or agencies | 41 | 18.5 |
| 20 | local agency or agencies | 3 | 1.4 |
| 21 | other | 3 | 1.4 |

Sponsors--generally refers to fund recipients who convert into and deliver services or fulfill contracts

| | | | |
|---|---|---|---|
| 22 | state agencies | 102 | 46.0 |
| 23 | local agencies | 105 | 47.0 |
| 24 | nonprofit institutions, including colleges and universities | 112 | 50.5 |
| 25 | hospitals, clinics, health centers, etc. | 44 | 19.8 |
| 26 | community based groups, including CAA's | 35 | 15.8 |
| 27 | individual professionals | 19 | 8.6 |
| 28 | individuals or families | 17 | 7.7 |
| 29 | particular schools | 16 | 7.2 |
| 30 | | | |
| 31 | other | 51 | 23.0 |

Disciplines or professions involved, where applicable

| | | | |
|---|---|---|---|
| 32 | medicine and public health | 56 | 25.2 |
| 33 | psychology | 22 | 9.9 |
| 34 | social work | 28 | 12.6 |
| 35 | nutrition | 18 | 8.1 |
| 36 | teaching, pre-elementary through non-vocational secondary | 52 | 23.4 |
| 111 | vocational and higher education | 11 | 5.0 |
| 37 | adult education | 17 | 7.7 |
| 38 | other professions | 67 | 30.1 |
| 114 | any of the above professions | 168 | 75.5 |

Target, by age or multiage group

| | | | |
|---|---|---|---|
| 113 | general population | 47 | 21.1 |
| 108 | children, fetal and infant | 43 | 19.3 |
| 39 | children, preschool age | 89 | 40.0 |
| 40 | children, elementary school age | 109 | 49.0 |
| 123 | not children specifically | 92 | 41.5 |

| | | n | % |
|---|---|---|---|
| 41 | adolescents | 110 | 49.5 |
| 42 | individual adults | 92 | 41.5 |
| 43 | families | 65 | 29.2 |
| 44 | partial or broken families (where exclusive of complete families) | 10 | 4.5 |
| 45 | elderly | 15 | 6.8 |
| 104 | communities | 15 | 6.8 |
| 46 | others | 55 | 24.8 |
| | Nature of program | | |
| 47 | creates new agencies | 11 | 5.0 |
| 48 | funds new projects' startup | 113 | 51.0 |
| 49 | maintains new and/or old programs | 162 | 73.0 |
| | Broad official goals of program | | |
| 50 | fill kids' needs | 86 | 38.7 |
| 51 | help families or ease stresses in family life | 75 | 33.7 |
| 52 | compensate for specific handicaps, deficiencies, and problems (excluding SES, race, ethnicity but including language problems) | 53 | 23.8 |
| 53 | improve equity (individual, family, community) | 69 | 31.0 |
| 54 | other | 113 | 51.0 |
| | Program reaches kids by | | |
| 55 | feeding them | 13 | 5.9 |
| 56 | enabling or providing home day care | 10 | 4.5 |
| 57 | providing simple day care | 9 | 4.0 |
| 58 | providing educational day care | 20 | 9.0 |
| 59 | providing recreational day care | 10 | 4.5 |
| 115 | any day care | 25 | 11.2 |
| 60 | direct services, including health | 57 | 25.6 |
| 101 | helping their schools | 53 | 23.8 |
| 61 | comprehensive child development work | 13 | 5.9 |
| 118 | any child work | 122 | 55.0 |
| 62 | allotting parents money | 9 | 4.0 |
| 63 | offering or referring child services to parents | 16 | 7.2 |
| 64 | teaching parents to help kids (especially in handicap programs) | 19 | 8.5 |
| 65 | help parents to raise SES or job level (this includes vocational training and counseling) | 38 | 17.1 |
| 66 | help parents improve living conditions (which means immediate living area) | 26 | 11.7 |
| 67 | comprehensive parent/family programs | 10 | 4.5 |
| 120 | any parent/family work | 89 | 40.0 |
| 121 | family or parent but no child work | 55 | 24.8 |

| | | n | % |
|---|---|---|---|
| 68 | improving living conditions directly | 23 | 10.3 |
| 69 | promoting community organization for general improvement | 18 | 8.1 |
| 70 | improving neighborhood conditions directly | 16 | 7.2 |
| 71 | coordinate and/or streamline existing social programs | 4 | 4.0 |
| 72 | comprehensive social work | 9 | 4.0 |
| | Target group (by restriction or intent) in addition to age/family | | |
| 73 | low income, poor | 53 | 23.8 |
| 74 | ethnic group (Puerto Rican, Indian, Black, Chicano, etc.) | 20 | 9.0 |
| 75 | urban | 14 | 6.3 |
| 76 | rural | 9 | 4.0 |
| 100 | educationally deprived | 8 | 3.6 |
| 77 | unskilled | 5 | 2.3 |
| 78 | handicapped (includes blind or deaf) | 20 | 9.0 |
| 112 | blind or deaf | 7 | 3.2 |
| 79 | mentally retarded or other mental health problems | 18 | 8.1 |
| 80 | migrant | 4 | 1.8 |
| 107 | geographic region | 4 | 1.8 |
| 110 | other restrictions | 25 | 11.3 |
| 117 | no restriction | 79 | 35.6 |
| | Program content and/or objectives | | |
| 81 | disbursement of money | 25 | 11.3 |
| 109 | capital goods and costs | 34 | 15.3 |
| 82 | payment of service costs | 103 | 46.5 |
| 105 | technical assistance, advice, expertise | 15 | 6.8 |
| 83 | training of professionals | 36 | 16.2 |
| 84 | training of non- and paraprofessionals | 28 | 12.6 |
| 85 | management | 16 | 7.2 |
| 86 | research and development | 41 | 18.5 |
| 102 | experimentation | 16 | 7.2 |
| 87 | evaluation | 10 | 4.5 |
| 88 | coordination of existing programs | 17 | 7.7 |
| 89 | referrals to existing programs | 14 | 6.3 |
| 90 | information gathering on other programs | 18 | 8.1 |
| | Broad aspects of child experience involved or affected | | |
| 96 | learning | 123 | 55.5 |
| 97 | love and affection | 65 | 29.4 |
| 98 | health/nutrition | 136 | 61.5 |
| 99 | recreation | 86 | 38.6 |

The Miscellaneous items, which are not given above, were largely utility codings to prepare specific lists for use in the body of this report (see Chapter 13 for several such uses).

Several of the findings of this tabulation were interesting. 55 per cent of the programs reached children or their schools directly (item #118: n = 122), while 24.8 per cent affected their families (#121: 55). The remainder had either no effects on children or were directed at their social milieu.

All but 35.6 per cent of the programs were directed at or restricted to some particular group (#117: 79); the 23.8 per cent directed at the poor represented the largest single subset (#73: 53).

A computer was used to prepare cross-tabulations of the incidence and coincidence of various characteristics. It also produced lists of programs fitting various such criteria, and gave appropriation totals for each list. For instance, the 53 programs directed at the poor accounted for over 14 billion dollars in FY 1971; 26 of these reached children or their schools directly. Here is the breakdown of all 53 programs:

Simple Tabulation by Item Low Income Selected on 73

| CRITERIA | n |
|---|---|
| **Source** | |
| OEO | 6 |
| NIH NIMH | 1 |
| OCD | 2 |
| HUD | 8 |
| LOL | 6 |
| BIA | 3 |
| USDA | 6 |
| OE | 9 |
| SRS | 6 |
| VA | 2 |
| SSA | 0 |
| HSMHA | 4 |
| DOJ | 0 |
| PHS | 0 |
| FDA | 0 |
| other | 0 |
| **Decision Level** | |
| source | 46 |
| region fed | 1 |
| state | 7 |
| local | 2 |
| other | 0 |

| CRITERIA | n |
|---|---|
| **Sponsors** | |
| state ag | 20 |
| local ag | 32 |
| nonprofit, univ. | 26 |
| hospital, etc. | 10 |
| community group | 16 |
| indiv. prof | 2 |
| indiv. or family | 3 |
| school | 4 |
| other | 10 |
| **Professions** | |
| any | 34 |
| medicine | 12 |
| psychology | 0 |
| social work | 8 |
| nutrition | 7 |
| 0-18 teach | 13 |
| voc & high ed | 3 |
| adult ed | 5 |
| other prof | 10 |

| CRITERIA | n |
|---|---|
| Target, Age Group | |
| gen pop | 4 |
| mat & inf | 5 |
| presch k | 16 |
| elem sch k | 13 |
| not mat-elem k | 31 |
| adoles | 16 |
| ind adults | 14 |
| families | 25 |
| partial fams | 4 |
| elderly | 3 |
| communities | 4 |
| others | 6 |
| Nature | |
| creates ag | 4 |
| new proj | 30 |
| maintains | 48 |
| Goals | |
| kids needs | 23 |
| fam stresses | 27 |
| compensate | 8 |
| imp equity | 24 |
| other | 28 |
| To Kids | |
| feeding | 6 |
| home dc | 3 |
| simple dc | 3 |
| educ dc | 4 |
| rec dc | 3 |
| any dc | 6 |
| direct servs | 10 |
| help schools | 8 |
| comp child develop. | 5 |
| any child | 26 |
| To Fams | |
| money to pars | 6 |
| serv refer | 4 |
| train pars | 5 |
| help raise SES | 10 |

| CRITERIA | n |
|---|---|
| To Fams (cont.) | |
| help imp liv c | 11 |
| comp par work | 6 |
| any par work | 29 |
| par but not k | 18 |
| Other | |
| improve liv c | 11 |
| comm org | 7 |
| imp neighb c | 2 |
| coord servs | 2 |
| comp soc work | 4 |
| Target, Restriction/Intent | |
| low income | 53 |
| ethnic | 6 |
| urban | 4 |
| rural | 3 |
| ed deprived | 4 |
| unskilled | 2 |
| hcapped | 3 |
| blind, deaf | 0 |
| ment hlth prob | 0 |
| migrant | 1 |
| geog reg | 0 |
| other | 3 |
| no res | 0 |
| Content | |
| disbursement | 11 |
| cap goods | 12 |
| serv costs | 33 |
| tech assist | 0 |
| train prof | 6 |
| train other | 6 |
| mngmnt | 9 |
| R & D | 5 |
| experiment | 2 |
| evaluate | 3 |
| coordinate | 4 |
| referral | 5 |
| info gather | 2 |

| CRITERIA | n |
|---|---|
| Child Experience | |
| learning | 39 |
| love & aff | 30 |
| health/nut | 43 |
| recreation | 34 |

Approximate Fed Outlay FY 71 $14,073,990 thousand, FY 72 $13,138,663 thousand

The sublist includes:

91. Family Planning Projects, Maternal and Child Health
224. Food Stamp Program
431. Aid to Families with Dependent Children
543. Volunteers in Service to America
581. Student Aid-Educational Opportunity Grants

and 48 other programs.

The way we have actually used these tables indicates their potential. In Chapter 13, for instance, we were able to suggest specific programs through which implementation of Family and Education recommendations could be started. It is always necessary, in policy deliberations, to have a clear conception of the status quo in terms of the policy being considered; regular application of these procedures to an improved data base would insure that, at least as federal child policies were concerned, such information would always be available. In a slightly less immediate way, thoughtful consideration of the patterns of service revealed by such data might indicate areas to which effort should be devoted. In Chapter 14 we have described the needs for research, in terms of both content and structure, in child development as it concerns federal policy. We propose this tool, that of careful coding, quantifying, and, tabulation of programs, as an adjunct to that process.

## Appendix III D

# Values, Knowledge and Social Policy

Martin Rein

It is almost universally accepted that rational thought should inform the development of public policies. The term, "rational thought" may not actually be used, and the assumption may be so thoroughly accepted that it is not recognized as deserving notice. But whether implicit or explicit the assumption is often made that policy should be the consequence of rational review.

Often this assumption is associated with the set of beliefs we might identify as the "science and technology" dogma. These are beliefs that we have a field of study of reality, science, which produces fundamental understanding. In the area of social policy this view holds that we must develop understanding of social reality so that we may subsequently apply that understanding in social policy. Research is to be directed to generating our fundamental understanding. Then, although the proper interpretation and application of that understanding may call for unusual experience, insight, and powers of invention, in principle the research findings contain the materials on which the application will be based. In principle it should be possible to complete the sequence of research leading to understanding and understanding leading to recommendation. Or in a more sophisticated form of the science and technology view we think of the process as iterative and believe we can move from research to initial understanding to application, to more research, further understanding and new application, to recognition of new problems; still more research, etc.

These assumptions are not so much false as they are overstated. However the assumptions are plausible, and because they are they contribute to inevitable frustrations when it is recognized that an increase in our knowledge is not accompanied by an increase in our ability to define policy. I want to call attention to two types of obstacles to the utilization of social research in a policy context: first the problem of interests, that different people want different things; and second the problem of open systems and contaminated fields, that reality is so complex that it defeats our ability to locate the sphere of understanding which we should apply.

These difficulties in the application of basic understanding obviously exist in every area but they may become especially great in the area of social policy if only because there ordinarily are more parties who feel involved. Policy in relation to such issues as the building of atomic generating plants, for example, so long as this remains an economic issue, can be decided by reference to projections of future energy needs and by consideration of economics and diseconomics. There will, of course, be interest groups whose own economic stake is dependent on utilization of one sort of fuel or another, or on continued expansion of energy resources, or the like. But the trade-offs would be fairly clear to begin with or become so after a while, and compromise might be reached. If not, then the conflict would at least be joined between clearly identified adversaries about clearly defined issues. But when construction of the atomic generating plant takes on social implications, when it is recognized as contributing a new danger to its environs or as raising issues regarding the social consequences or various waste disposal programs, the matter becomes more complex. Now there are many more parties than can be easily dealt with including all those who were previously engaged and in addition neighborhood or community defenders, environmentalists, and the like. Compromises become extraordinarily difficult to work out, partly because so much of the cost to at least some of the parties is in their anticipated quality of life. It helps, of course, to have as much understanding as possible of the reality under debate; but the debate cannot be ended by this additional understanding, and as it becomes more complex and the competing values and interest groups become more visible, the issue may appear insoluble. Nor could it have been entirely anticipated that the pollution potential of the enterprise would become a public issue. Economic gain and loss is a persistent concern but what we believe determines the quality of our lives is constantly changing in order of importance if not more fundamentally. There is no consensus on how to sum up the costs and benefits to different groups or the weights to assign to economic gains and social externalities.

We need to distinguish between questions of implementation and questions of policy. The questions of implementation assume the objective to be given and ask only how we can reach it. What other consequences might follow from a pursuit or achievement of the aim? The questions of policy ask for an ordering of objectives. It is in connection with questions of policy that the search for dispassionate understanding may let us down. But, of course, questions of implementation, if the aims are attacked can become questions of policy.

In the social arena more than any other, because of this extraordinary difficulty of reconciling and weighing multiple and conflicting interests, we may move away from our belief in rational policy making and accept as the best that can be done whatever the political process produces. But sometimes we go farther than this and reserve our commitment to rationality by identifying the political process with rational decision making. We may hold that when certain conditions are met such as representation by a political process, of all interested parties, we have a rational decision-making process. Yet we should recognize that though the approach may be just, its product may be unrelated to knowledge and in this sense non-rational.

Even questions of implementation where there are no immediate clashes of interest, may be problematic in social areas because of the complexity of the situation for which policy is being proposed. Head Start offers an example. It is not yet clear where the roots of academic competence are to be found, or how clearly linked is academic achievement with future earnings, and so the underlying theory of the program is uncertain. But even assuming that we knew that academic competence begins with every early exposure to academic tools, and we accepted such competence as good in its own right, for us to be sure that Head Start, as an application, would work, we would also have to know about schools, teachers, families and peers and they impinge on the Head Start students. This is not to claim that Head Start does not work or should not have been tried, but rather to point out that in social areas the success of an application depends on the impacts of factors from many spheres in addition to the one we think of as the truly underlying sphere.

In this context, it may be useful to distinguish between the kinds of laws which come out of physical laboratories and which then guide research and applications in the industrial laboratories, and the kinds of understanding which comes out of sociological study of real situations, which rarely lead to the formulation of regularities,[1] but rather describe the functioning of what Lawrence Frank called organized complexities. Because these complexities are affected by external events, even if there were full knowledge about the past there would be continuing uncertainties about the future so long as the future externalities were uncertain.

Inferences based on our past research would in no area of study be applicable to a situation which has "significantly" changed. But the likelihood of significant change in social areas seems unusually great. And the only way to determine whether the new situation is comparable to the old one is _ex post facto_. For this reason, knowledge in the policy arena is not entirely self-correcting. The program of science requires that one continue to experiment until the experimental results and the theory correspond, with the data serving as a correction to the theory, and the theory as a guide to experiment. But in policy oriented research there is no way of anticipating dramatic changes in the social context which have fateful consequences for the implementation of the policies. A reasonable argument based on past situations must surrender to the uncertainty of future events, thus weakening the knowledge base from which policy proceeds.

These problems of multiple interest and of various forms of complexity lead to the suggestion that we replace our former model of rational thought with a new one. In this modified model we would not expect research to lead to understanding to lead to guaranteed policy, but would rather expect that each policy would be a probe, asking only about the current nature of reality. Research would therefore contribute to the adaption of policies to changing or unpredicted events.

---

[1] Such regularities do exist; for example some have been identified in relation to the dependence of young children on the accessibility of attachment figures for healthy development. They are rarely of critical importance to an application except those applications immediately derived from them.

But it is our experience that this model, too, proves faulty. The difficulty arises because of our own processes for learning, for organizing understanding. New information is assimilated into a paradigm or a belief system which is itself a mixture of aspirations, assumptions, and experience and this paradigm which need not be internally consistent, is remarkably persistent. Typically we tend to incorporate new sources of knowledge and information so that they are compatible with the belief system we hold. And while it does appear that under certain circumstances new paradigms achieve hegemony, how that process operates is not well understood. Some might argue that it is not so much, actually, that people change their paradigms as that the people who hold unsatisfactory paradigms die out or are repudiated. Perhaps one should not say that individuals never change paradigms. Some individuals change their minds when there is strong invalidating information. Many revise their sense of reality in response to depressions and wars. But whether the often ambiguous and incomplete information derived from social science research can also serve to modify the belief systems we hold would seem, in general, unlikely.

Let me offer a specific example to illustrate how a paradigm can be resistive to change. In cities throughout the country, there has been a substantial increase in educational expenditures for ghetto schools as a result of the introduction of compensatory programs. But studies of the outcomes of these efforts indicate that they have contributed little to changing the level of educational achievement as measured by standardized tests. Other national and local studies confirm these observations. A Rand state-of-the-art report which reviewed reforms such as augmenting resources, improving the processes and methods of education and varying the organizational environment of the school, concluded that "research has found nothing that consistently and unambiguously makes a difference in student outcomes.....Research has not discovered any educational practice that offers a high probability of success."[2.] What conclusions can be drawn from these findings? After the methodological battles are aired, the implications remain stubbornly inconclusive, largely, because the same evidence can be interpreted as compatible with sharply different views. Those who were initially committed to the reduction of educational inequality treat the findings as demonstrating that what we have thus far done is sufficient. Those who were initially skeptical for the modifiability of academic potential treat the findings as confirming their presumptions.

The interpretation of the implications of research on the effectiveness of policy is further complicated by beliefs regarding the ability and responsibility of government to intervene in the process. Some hold the view that continuity of governmental commitment must be sustained even if programs fail. They would treat failure as demonstrating that the program had not tried hard enough, long enough, consistently enough

---

[2.] Harvey A. Averch _et al._, _How Effective is Schooling? A Critical Review and Synthesis of Research Findings_, Rand Corporation, December, 1971, p. IV.

and with sufficient resources to accomplish the task. In his message to Congress in support of Equal Educational Opportunities Act of 1972, President Nixon adopted this view. He argued that:

> While there is a great deal yet to be learned about the design of successful compensatory programs, the experience so far does point in one crucial direction: to the importance of providing sufficiently concentrated funding to establish the educational equivalent of a "critical mass," or threshold level. Where funds have been spread too thinly, they have been wasted or dissipated with little to show for their expenditure. Where they have been concentrated, the results have been frequently encouraging and sometimes dramatic.

Others, however, begin with the belief that governmental intervention in most areas of social policy is typically ineffective, or worse still, generates more problems than it resolves. They interpret information reporting the limited success of education intervention as only corroborating what they already knew, and recommend that the programs be ended or assigned for final priority. If the data had shown there was improvement they might have raised the issue of the cost required to produce the benefit, or have explained the success as due to "creaming." Positive findings are perhaps a bit more difficult to explain away than negative findings but the difficulties are not insuperable. Negative findings can be discounted as due to measurement errors or diffuseness of goals or insufficient input, or whatever. In the very frequent instance of inconclusive findings, different parties can choose which findings they will attend to. In these and other ways paradigms can be defended against new data. The conclusion to be reached from this example is that research findings may be used to support the view you already hold, but if they do not, they need not be interpreted as invalidating it.

We cannot, however, leave the matter here, in so helpless a state. It offends our cherished allegiance to the view that learning from experience is not only necessary but possible. If policy commitments are only with difficulty informed by evidence, what can we count on; what can we do?

Before considering how paradigms may be changed, however, we should note that when the valuing component of paradigms is intense research information will simply have no effect on modifying paradigms. Much of the writings on poverty have taken place within a conceptual framework to establish a reasonable quality of life. As this paradigm is developed, it absorbs data regarding the lesser opportunity of the poor for advancement, the inadequate living conditions of the poor and the greater incidence of disease and lower life expectancy of the poor. All these observations extend and enrich the fundamental idea that poverty is injustice and that much of the injustice has to do with inequitable distribution of opportunities and resources to alter life situations. But these same data, perhaps given different emphasis, and organized with different observations, could contribute to the enrichmentand development of still other paradigms such as those which would see poverty as another culture, a way of life with its own norms and scales of values, a way of life in which, for example, having uncommitted time is more important than the amassing of human capital through education or job experience.

Virtually the same data given different weightings and organized differently can fill out different paradigms. But paradigms often contain a valuing element, a contribution of the sense of fitness held by those who use the paradigms. In these cases they are even more difficult to dislodge by data. For example, one policy paradigm which we can trace to Bentham holds that those who accept poor relief should be more uncomfortable than the lowest paid independent laborer. This paradigm can be confronted with the paradigm which can be traced to the Webbs to the effect that citizenship provides each individual with the right to, at a minimum, education and training and employment and equitable distribution of medical care. Because of the valuing element no research data can force the acceptance of one paradigm rather than the other.

Paradigms are by no means static and unresilient. They may be resistent to invalidation but they are open to development. They evolve over time. Scholarly writings contribute to such development, making possible the reformulating, elaboration and qualification of ideas within the same basic paradigm. An example is the redefinition of poverty from a state of destitution and subsistence, conceived of as a failure to achieve minimum levels, to the broader idea that poverty is about inequalities and especially those inequalities that emerge from the exclusion of specific groups from the dynamic and evolving living conditions, rights and opportunities which are available to the average members of that society.

Social policy paradigms do develop, and we need to pay more attention to the processes by which this happens. Policy paradigms, as I have partially suggested, are a curious admixture of psychological assumptions, scientific concepts, value commitments, social aspirations, personal interests, and administrative constraint. They do not constitute a social science theory in the sense of being able to organize disparate evidence and predict future patterns. They are more like personal belief systems, not entirely manifest, encompassing contradictions rather than seeking to eliminate them. It seems obvious that we need to distinguish personal and collective paradigms, but we really do not understand the development of either.

We might begin by considering those individuals who hold paradigms without being strongly committed to them or who hold quite different paradigms simultaneously. One way of gaining the loyalty of those without a deep commitment to a paradigm is the presentation of appealing or dramatic imagery. New imagery might even make some differnt to those who are already committed to paradigms, by shaking their convictions in the essential rightness of what they believe. Those who maintain an internal dialectic may be led to display "paradigm drift."

Another contribution to paradigm development comes as the holders of the old paradigms become discredited. They may themselves retain the paradigm but they no longer have a monopoly over the levers of power. And, more important, their displacement signals the lessened legitimacy of the old paradigm.

Other processes can operate, too. The writings of Kuhn are useful in this context -- especially his idea of a replacement of paradigms as a response to crisis. (Much of what has preceded is, of course, indebted to Kuhn), Kuhn argues that science does not develop by the gradual accumulation of new knowledge and the correction of previous error and new discoveries, but as a series of crises in adaption. Normal science proceeds first from puzzle-solving within the context of an accepted paradigm which organizes disciplinary realities. Anomalies are discovered from the usual puzzle-solving activities and these become increasingly hard to assimilate into a dominant paradigm. A scientific crisis emerges when scientists become aware that the paradigm's organizing capacity has collapsed but no substitutes are at hand. The crisis is followed by a scientific revolution in which a new, integrative paradigm is constructed, usually by the powerful insight of a single man of genius. What follows then is a struggle for acceptance, because the new paradigm offers a reformulation of the problem and a redefinition of the kinds of data that bear on the problem. Validation takes place in terms of the accepted scientific criteria; over time the new paradigm is itself subject to the same process of challenge and assault. Science, then, develops as a series of crises in adaptations characterized by abrupt discontinuities rather than by gradualism and continuity.[3]

Perhaps this suggests a process that might lead to the replacement of paradigms and not simply their development. One might think of crises within the policy-making group which causes them to cast about for new paradigms, and also about crises among individuals which might lead some, if not all, to replace paradigms.

No systematic theory has emerged in this area. I would like to propose one, a speculative one to be sure. The question is how do paradigms change within administrative groups. Suppose there is an accepted paradigm within an administrative group that organizes the dominant idea that are reflections of the structure of the society at a particular point in time. As the economic, social and political dimensions of the society change, there is an increased receptivity to new ideas which are needed to deal with the new socio-political and economic realities. There is a scramble for new ideas, and a new paradigm is sought which can serve as an organizing framework for the development of specific programs. This new policy paradigm is, of course, determined by ideological preferences as well as by social and political realities. But the changed reality does change the paradigms. Actually the old ones are not altogether forsaken; administrative pragmatism and eclecticism provides continuity with the past.

---

[3] Thomas Kuhn, The Spreading of Scientific Revolutions, 2nd ed. Chicago: University of Chicago Press, 1970, pp. 10-25. For a criticism of Kuhn see J. Kahalos and A. Musgrave, Criticism and the Growth of Knowledge, Cambridge University Press, 1970.

We expect that typically research will follow rather than shape the accepted paradigms, which have instead been responsive to economic, political and social changes. Once new imagery begins to take hold, as was the case with the rediscovery of poverty in America in the 1960's, research moves in to provide magnitudes, dimensions and particulars. Using these data but also drawing upon quite independent ideas of the nature of man and society, theories of causality then emerge to organize the new research data which, since they were gathered in response to issues formulated by the new paradigm, support the new paradigm. Donnison elaborates this thesis in a review of the evolution of ideas about learning and educational policies in Britain; he observes that:

> In 1938 the Spens Committee was dourly determinist: "Intellectual development during childhood appears to progress as if it were governed by a single, central factor, usually known as 'general intelligence', which may be broadly described as innate all-round intellectual ability." In 1959 the Crowther Committee was cautiously hopeful: "it may well be that there is a pool of ability that imposes an upper limit on what can be done by education at any given time. But....the limit has not been reached....." In 1963 the Newton Committee was confident: Intellectual talent is not a fixed quantity which we have to work but a variable that can be modified by social policy and educational approaches..." But for the Public Schools Commission in 1970 the essential policy question has changed. *Whatever* the human capacities available, '...our whole educational endeavor must be to get more and more children to take their education to a point that enables them to go on learning and adapting throughout their lives.' Each of these reports drew on research on influence policy. *But the reverse influence often proved stronger*. The policies which followed from the 1944 Education Act and the aftermath of Spens generated a massive investment in educational research devoted to the prediction of academic attainment and the perfection of selection techniques. Yet by the end of the period the Plowden Committee, itself a generator of new policies, brushed most of this work aside and pointed to a whole range of urgent, unresolved problems.[4]

It is only on rare occasions that research contributes the evidence which changes perspectives and then only if research is supported by broader economic and social changes in society. To the extent that policy is determined by the paradigms held by the policy framers, which I have argued is a quite sizeable extent, research contributes little to the process of policy formulation. Nor is this the fault of the research. There are, of course, as have been suggested, many reasons for the inconclusiveness of social research and there have been many proposals for reducing these difficulties. Some have hoped to increase the quality of research by more emphasis on social experimentation, others have hoped to increase utilization by better methods of interpretation and dissemination, including the involvement of decision makers in these processes. But if it is the stability of paradigms that is the issue, we must examine how they are formed and changed in order to judge how research can be made to play a more important role in policy making.

---

[4] Donnison, David, "The Contribution of Research to Social Policies and Programmes", Working Note, CEW WN 307, Center for Environmental Studies, London, mimeo, February 1972.

How can policy paradigms be studied? It would seem to me that it might be strategic in the study of policy paradigms to examine (a) the disparity between social ideals and realities; (b) the theories of intervention developed to redress these disparities; and (c) specific programs which translate the theory into action.

Paradigms directed to social action can be analyzed in terms of these elements. Each is, of course, embedded in social, political and economic contexts, and a complete study of accepted paradigms might consider the interplay between the context and elements of the paradigms. The following section sets out some ideas regarding a more limited enterprise, one which would study ideals, theories and programs without asking the question of their external determinants.

## The Disparity Between Ideals and Realities

Decisions about welfare, T. H. Marhsall argued, "must draw on standards of value embodied in an autonomous ethical system which, though an intrinsic part of the contemporary civilization, is not the product either of the summation of individual preferences (as in the market) or of a hypothetical majority vote." The ideals which inform social policy, according to this formulation, are neither the outcome of consumer choice nor interest group politics. Marshall continues, "It is impossible to say exactly how these ethical standards arise in a society or are recognized by its members... Without a foundation of near-consensus, no general social policy would be policy."[5] And because such consensus is seldom reached, it seems possible to conclude that there is no social policy but only multiple policies which are contradictory, conflicting and ambiguous. Thus social ideals are not self-evident, they need to be discovered.

Perhaps the process operates in the following way. When the treatment of special groups seems inconsistent with this ethical standard, a diffuse dissonance is established which announces that the state of affairs is morally wrong. Paradigms from which emanate pressures for reform are substantially strengthened if they assimilate not only the ideas that something is morally wrong but also the ideas that this state of affairs is dangerous as well. Pragmatism thus reinforces morality.

---

[5] T. H. Marshall, "Value Problems of Welfare Capitalism, "Journal of Social Policy (U.K.), Vol. 1, Part I, January 1972, p.20.

Our political system operates in such a way that it is responsive to strong political constituencies. Most public policies are kept in force if they were not actually initiated by interest groups who are powerful and articulate. The interest group marshals whatever empirical evidence or persuasive argument it can develop to set forth its case. But the persuasiveness lies more in its ability to apply pressure than in the substance of its argument. It appears to be a peculiarity of welfare policy that the case for reform is expected to be substantive as well as political: that paradigms are consulted and not only political exigencies. However, the kinds of arguments which the spokesmen for welfare programs develop to identify the state of dissonance and its treatment are of necessity able to influence only those who share the same culture and values -- the same paradigms -- as they.

Research which sets out to identify the disparity between ideals and realities may take several forms. Most characteristically, however, it is an attempt to document the scope of the disparity on the grounds that the case for change is more compelling if large numbers of persons are affected. Thus, studies of the incidence of hunger, poverty, ill health, chronic unemployment, are examples of the kind of evidence which is used to create a case that there is a disparity that should be redressed. These studies, as we have said, can be assimilated to any paradigm, but they support those paradigms which arise in part from impatience with the status quo.

Qualitative studies may also be undertaken to provide public insight into the meaning for the individual when hunger, unemployment, low income and ill health strike. Research might also call attention to the social consequences of these conditions. Studies of these sorts develop imagery regarding reality which can have importance in the development of paradigms among those who are only weakly committed to one or another.

There are, of course, other strategies by which research may serve as moral witness to the failure of society to honor its standards and to shape the ideals to which public policy should be directed and which can in this way support the paradigms of the disaffected. However, it may be useful to point out that research can be aimed at finding new tasks to which the paradigms of the "Ins" can be applied. So, for example, some research has tried to demonstrate that technological developments have made work redundant and we should prepare for a society which allocates work as a resource rather than leisure. This research is easier to integrate into an essentially accepting view of our society than would be research on unemployement.

Presumptions regarding ideals and the extent to which, if at all, the society fails to realize those ideals leads naturally to proposals for intervention and implementation. The discussion that follows attempts to make these ideas explicit by concentrating on one set of ideals, then to trace out the theory of intervention which informs the efforts to decrease the disparity between ideals and practice and then to examine the theory of implementation and the programs which the theory spawns. Let us take the ideal of equalizing opportunities, of assuring that a permanent underclass does not develop in American society where disadvantages are perpetuated from one generation to another. We might note that most of the studies of occupational, social and income mobility, because they have been organized within a policy framework, while they describe and analyze the pattern of social stratification and social mobility within society, are of little immediate use in the formulation of policy. A good deal of policy-oriented study is an attempt to draw together empirical studies designed for other purposes. Some writers have argued that the ideal of living in an open society in which individuals can alter their social position if they work hard and have talent is systematically thwarted by the failures of the educational system. Policy-oriented researchers have accordingly attempted to document disparities in educational achievements to demonstrate that the goals of equalizing opportunity have been neglected by society. In this way a paradigm is developed.

Having documented the failure to achieve ideals, those who hold this paradigm must then consider what kind of theory of intervention can help reduce the disparity between ideals and reality. The theory they develop will be at once ideological and empirical. It may also be phrased in such a way as to be politically acceptable in whatever seems to be the arena of decision-making.

Consider the paradigm brought to bear on problems of poverty which holds that an individualistic society should provide its members with the opportunity to step up the social ladder. This paradigm will then search for data regarding the causes of the frustration of opportunity. The initial values of the paradigm do not determine the form of intervention. Is denial by institutions a crucial problem in inhibiting the equalization of opportunity or is individual incapacity a more urgent problem? Logically, we may not actually have to choose: "Isn't it perfectly possible to consider poverty as an integral property of the social structure, while at the same time acknowledging....(that) individual people may experience serious social handicaps because of their poverty, and may need individual help to overcome these deficiences?" Yet theories of intervention, of how to encourage individual social mobility seldom embrace an interactive theory. It seems that the paradigm whose development we are tracing here must follow one of two incompatible paths. The institutional and individual views each imply a competing policy paradigm, which in turn "presumes a different conceptual framework, steers attention to different variables, poses problems of a different order, and suggests different methods of approach to solve these problems.[6]

---

[6] Roland R. Warren, "The Sociology of Knowledge and the Problem of the Inner Cities," Social Science Quarterly, December 1971, p. 473.

There are quite different paradigms in this area. Another proposes that promoting individual mobility is less essential than promoting collective mobility. While not elminating stratifications, it would change the degree of inequality by shifting the position of the groups at the bottom relative to those at the middle or top by raising the prestige levels, working conditions, salary levels, fringe benefits, or some combination of these approaches. This view directs attention not to the failure of the poor but rather to the failure of the mechanisms for allocating resources and prestige among different occupational and social groupings.

Yet another organization of interests, ideas and evidence calls attention to the existence of a dual labor market divided by the stability of the same job depending upon the industry and region in which it is located. This paradigm gives weight to the observation that there can be as much difference in earnings among porters working in different industries as there is between the porter and the professor working in the same college. The criticism which stems from this view is directed at the American system for distribution of resources to collectivities distinquished by industry rather than occupation. The theories of intervention spring from the paradigms which underlie them.

Research does, in fact, challenge some of these paradigms. A recent study by Christopher Jencks convincingly shows that the relationship between educational achievement, IQ and future income is very marginal.[7] This brings into question those views which hold the educational establishment responsible for inequality in eventual class position, not to mention those that see early deprivation as responsible for low IQ which is, in turn, responsible for later absence of success. Yet it is doubtful that this finding will do more than encourage some paradigms, discourage others; it will very likely be assimilated without causing dramatic paradigmatic change.

## Program Evaluation

Specific programs translate the broadly defined theory of intervention into concrete actions, and it is these programs which are the object of evaluation. After having considered the different ways in which paradigms organize ideas and information about the ideals to be pursued and the means to achieve them, it might be useful to ask how research on the effectiveness of policy is itself invaded by paradigms, though not necessarily by these same paradigms.

There are major differences in presumptions regarding the proper role of the social scientist in the development of social policy. Donald Campbell makes the argument explicit when he urges that the social scientist repudiate the role of "scholar-advisor" and embrace, instead, the more passive role of helping society decide "whether or not its innovations have achieved desired goals without damaging side effects. The job of a methodologist... is not to say what is to be done, but rather to say what has been done." This view is reinforced by Moynihan who asserts that the role of social scientist is not to formulate policies but only to evaluate them. In this context, the social scientist is servant to the political process. Campbell goes on to explain that "we have no elegantly successful theories that predict precisely in widely different settings, nor do we have the capacity to make definitive choices among competing theories. Even if we had, the social setting of ameliorative programs involve so many complexities that the guesses of the experienced administrator and politician are apt to be, on the average, as wise as the social scientist. All this leads Campbell to advocate "the role of servant rather than leader for the social scientist." [8]

---

[7] Christopher Jencks et al., Inequality, New York: Basic Books, 1972 (in press).

A competing point of view is presented by Brian Berry who argues that "all national debates notwithstanding, there can be no agreement either on goals or on societal relationships that link program inputs to sought-after outputs...American society is inherently incapable of being goal-oriented for deep-seated ideological reasons; accordingly, applied cybernetic rationality cannot be the basis of social accounting." [9] The ideal of the servant role cannot be pursued if the purposes of the program cannot be asserted.

The case for evaluative studies is nevertheless compelling and perhaps self-evident. What, after all, could be more rational than to evaluate the outcomes of public policy? There is no sense of having enthusiasm for policies of reform if we never find out if they work.

But, somehow evaluative studies seem in the end almost always to react against the reform itself, to support the preconceptions of those who believed, to begin with, that nothing works. But from these observations we must not conclude that we can be satisfied with the reform without evaluation. Few would argue that reform is an act of faith, and that what matters is the faith and not the outcome. If we are concerned about outcome, then we must see that programs do what they are intended to do.

---

[8] Donald T. Campbell, "Critical Problems in the Evaluation of Social Programs", a paper prepared for the annual meeting of the Division of Behavioral Sciences, National Academy of Sciences, May 19-20, 1970, p. 2.

[9] Brian J. L. Berry, "Social Accounting Systems: Problems in Conceptualization and Realization", a paper presented at the annual meeting of the National Academy of Sciences, May 1972.

Evaluative studies seem consistently to assault the reform itself. Some observers of this trend fear that the avalanche of negative findings provide intellectual support for conservative or reactionary paradigms which repudiate a strong and vigorous role for government in improving the position of the weakest members of society. Schick, quoting an OEO official's despair about the recurrent failures of compensatory educational programs, notes that we may have confronted a "problem that schools can't deal with and maybe...we have to go beyond the schools. If public institutions offer no relief, the temptation is strong to invade heretofore private spheres in the search for better outcomes....The Federal government has tried to manipulate private social behavior through the use of incentives. When this 'indirect' approach fails, pressure for direct social action arises. Preschool centers and even government in loco parentis become real possibilities." [10]

If paradigms are as resistent to change as I have argued, such anxieties may be inappropriate. What some liberal social scientists may be disconcerted about is the political use of their empirical studies to support social ideas they do not share. Negative evaluations must also confuse those who have only weak attachments to any social policy paradigm and hence a crisis of belief erupts when new information cannot be assimilated into earlier held belief systems.

How do evaluative studies help to clarify the crucial choices within a policy paradigm? It is difficult to determine when the theory of intervention is right but the program implementation is faulty, or when the theory is wrong because the details which led to the theory are miscast. After all, at least three different options are possible: (a) The ideals are right, but the implementation was inappropriate, perhaps because the design of the program was faulty, or the level of commitment was insufficient, or the critical threshold was not reached because exposure was too weak. (The medicine didn't work, because the dose was too weak). (b) The ideals were right, but the theory of intervention was wrong. For example, education is not a key to equalizing opportunity and income since the link between education and income in a society whose occupational structure is changing is very elusive and indeterminate. (c) The ideals themselves are impractical; no theory of intervention can achieve them and new ideals are needed. Banfield has, for example, argued that the effort to alter the time preferences of adults is a self-defeating task and new and more realistic goals are required. His book is alleged to be required reading in the White House.

In evaluating a policy paradigm, it is important to be able to assess whether the ideal, or the theory of intervention, or the program which translates the theory into a specific course of action is defective. Program evaluations can only say something about program implementation. Many evaluative studies of poverty programs were of limited use because they only inquired as to whether the program worked or not. These "go/no go" studies could offer no suggestions as to how to make the program work better. Such program designs are not based simply on dispassionate scientific judgement, but are an example of a political paradigm about research and policy. When the ideals remain firm and the theory of intervention is unaltered, research seems useless if it is unable to suggest areas for specific program improvement. The research on Head Start is an example, given a continuing commitment to the legitimate goals of attempting to enable youngsters to compete on equal terms in school, and given the assumption that early education is important in shaping academic achievement and that ability is related to future income. Negative findings about the program simply produce a diffuse sense of dissatisfaction and frustration, discrediting both the value of research and the program.

---

[10] Alan Schick, "Up from Failure", a paper prepared for the Conference on Centrally Planned Change, North Carolina, April 26 - 29, 1972, p. 22, mimeo.

The weakness of net impact evaluation studies suggests the importance of designing studies to take account of variations of the same basic program. Such an approach could avoid total negativism since it would permit making statements about which programs work better than others. But Thomas Glennan, director of research and evaluation at OEO, calls attention to the difficulty of evaluating the outcomes of systematic program variations. It is difficult to sort out the "confounding of these treatments with population characteristics or with a project administration....Is a project a success because of some inherent superiority of its design, or because of its appropriateness for a particular population, or because of the charisma of the single administrator? [11] Each promising new approach is vulnerable to get another fundamental flaw.

As we suggested earlier, if one is interested in assessing the theory of intervention rather than a specific program, it is necessary to look at processes and try to examine if events occurred as they were supposed to. That is to say, were the inputs to be evaluated those called for by the theory? For example, if community action theory holds that all interested parties should collectively define the problems and priorities of ghetto residents and thereby create new programs from their reassessment, then the test of the theory requires a study of the processes. We would want to know whether things worked out according to program intention. Such a review might show that the program did not arise from the processes which were implied in the theory but were imposed ad hoc. And so the validity of the theory can be questioned. The support for outcome studies and the rejection of process studies proved an example of how the study of effectiveness of policy is itself subjected to unnoticed paradigms.

If one wants to question the ideals rather than the theory of the programs which are the objects of the evaluative study, then research needs to reexamine the assumptions on which the ideals are based. For example, if structural unemployment persists so that a substantial portion of the population will always be unemployed, then the ideal of equalizing opportunity can only mean equalizing the risk of being unemployed.

---

[11] Thomas K. Glennan, "Political and Institutional Factors in Social Experimentation", p. 6.

The best conclusion to be reached from this review of program evaluation is that we should not draw conclusions from the results of one kind of research which actually follow from another type of research. Social policy research is at great risk of being totally inconclusive because we too quickly move between ideals, theory of intervention, and program specifics, when no such implications can be drawn from the research. To use research productively, it is important to be clear at what level of analysis the research is relevant. There is a danger of drawing inappropriate conclusions about ideals and theories from data about the implementation of the program.